

# Secondary Recommendations Report

Building name

## Green Skid Aministration Build

Building type: B1 Offices and Workshop businesses

Date: Wed Aug 19 20:55:14 2015

This report lists recommendations for energy-efficiency improvements to the building.

### Key to colour codes used in this report

Included by the calculation

Included by the user

Excluded by the user

### Recommendations for HEATING

#### HEATING accounts for 6.9% of the CO2 emissions

The overall energy performance of HEATING provision is FAIR

The overall CO2 performance of HEATING provision is FAIR

The average energy efficiency of HEATING provision is GOOD

The average CO2 efficiency of HEATING provision is GOOD

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#### Add time control to heating system.

Code: EPC-H2

Applicable to: Whole building

Comments:

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#### Add local time control to heating system.

Code: EPC-H5

Applicable to: Whole building

Comments:

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#### Add local temperature control to the heating system.

Code: EPC-H6

Applicable to: Whole building

Comments:

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#### Add optimum start/stop to the heating system.

Code: EPC-H7

Applicable to: Whole building

Comments:

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#### Add weather compensation controls to heating system.

Code: EPC-H8

Applicable to: Whole building

Comments:

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**This recommendation was excluded by the assessor.**

**Consider replacing heating boiler plant with high efficiency type.**

Code: EPC-H1  
Applicable to: Whole building

Comments: No heating boiler plant within building

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**This recommendation was excluded by the assessor.**

**Consider replacing heating boiler plant with a condensing type.**

Code: EPC-H3  
Applicable to: Whole building

Comments: No comments from assessor

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**The default heat generator efficiency is chosen. It is recommended that the heat generator system be investigated to gain an understanding of its efficiency and possible improvements.**

Code: EPC-H4  
Applicable to: Whole building

Comments:

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**The default heat generator efficiency is chosen. It is recommended that the heat generator system be investigated to gain an understanding of its efficiency and possible improvements.**

Code: EPC-H4  
Applicable to: HVAC system green skips

Comments:

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**Add time control to heating system.**

Code: EPC-H2  
Applicable to: HVAC system green skips

Comments:

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**Add local time control to heating system.**

Code: EPC-H5  
Applicable to: HVAC system green skips

Comments:

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**Add local temperature control to the heating system.**

Code: EPC-H6  
Applicable to: HVAC system green skips

Comments:

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**Add optimum start/stop to the heating system.**

Code: EPC-H7  
Applicable to: HVAC system green skips

Comments:

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**Add weather compensation controls to heating system.**

Code: EPC-H8  
Applicable to: HVAC system green skips

Comments:

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## Recommendations for COOLING

### **COOLING accounts for 60.8% of the CO2 emissions**

The overall energy performance of COOLING provision is POOR

The overall CO2 performance of COOLING provision is POOR

The average energy efficiency of COOLING provision is GOOD

The average CO2 efficiency of COOLING provision is GOOD

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#### **This recommendation was excluded by the assessor.**

**The default chiller efficiency is chosen. It is recommended that the chiller system be investigated to gain an understanding of its efficiency and possible improvements.**

Code: EPC-C1

Applicable to: Whole building

Comments: No comments from assessor

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#### **This recommendation was excluded by the assessor.**

**Chiller efficiency is low. Consider either upgrading chiller plant or changing system to VRF.**

Code: EPC-C2

Applicable to: Whole building

Comments: No comments from assessor

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#### **Add time control to cooling system.**

Code: EPC-C4

Applicable to: Whole building

Comments:

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#### **Add local time control to cooling system.**

Code: EPC-C5

Applicable to: Whole building

Comments:

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#### **Add local temperature control to the cooling system.**

Code: EPC-C6

Applicable to: Whole building

Comments:

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#### **Add optimum start/stop to the cooling system.**

Code: EPC-C7

Applicable to: Whole building

Comments:

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**The default chiller efficiency is chosen. It is recommended that the chiller system be investigated to gain an understanding of its efficiency and possible improvements.**

Code: EPC-C1

Applicable to: HVAC system green skips

Comments:

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#### **Add time control to cooling system.**

Code: EPC-C4  
Applicable to: HVAC system green skips

Comments:

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**Add local time control to cooling system.**

Code: EPC-C5  
Applicable to: HVAC system green skips

Comments:

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**Add local temperature control to the cooling system.**

Code: EPC-C6  
Applicable to: HVAC system green skips

Comments:

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**Add optimum start/stop to the cooling system.**

Code: EPC-C7  
Applicable to: HVAC system green skips

Comments:

## Recommendations for HOT-WATER

**HOT-WATER accounts for 4% of the CO2 emissions**

The overall energy performance of HOT-WATER provision is FAIR

The overall CO2 performance of HOT-WATER provision is FAIR

The average energy efficiency of HOT-WATER provision is POOR

The average CO2 efficiency of HOT-WATER provision is POOR

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**Install more efficient water heater.**

Code: EPC-W1  
Applicable to: Whole building

Comments:

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**Consider replacing HWS with point of use system.**

Code: EPC-W2  
Applicable to: Whole building

Comments:

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**Install more efficient water heater.**

Code: EPC-W1  
Applicable to: Basic HWS

Comments:

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**Consider replacing HWS with point of use system.**

Code: EPC-W2  
Applicable to: Basic HWS

Comments:

## Recommendations for LIGHTING

### LIGHTING accounts for 28.1% of the CO2 emissions

The overall energy performance of LIGHTING provision is FAIR

The overall CO2 performance of LIGHTING provision is FAIR

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#### This recommendation was excluded by the assessor.

**Replace 38mm diameter (T12) fluorescent tubes on failure with 26mm (T8) tubes.**

Code: EPC-L1

Applicable to: Whole building

Comments: No comments from assessor

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#### Replace tungsten GLS lamps with CFLs: Payback period dependent on hours of use.

Code: EPC-L2

Applicable to: Whole building

Comments:

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#### This recommendation was excluded by the assessor.

**Replace high-pressure mercury discharge lamps with plug-in SON replacements.**

Code: EPC-L3

Applicable to: Whole building

Comments: No comments from assessor

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#### Replace tungsten GLS spotlights with low-voltage tungsten halogen: Payback period dependent on hours of use.

Code: EPC-L4

Applicable to: Whole building

Comments: LED lighting

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#### This recommendation was excluded by the assessor.

**Consider replacing T8 lamps with retrofit T5 conversion kit.**

Code: EPC-L5

Applicable to: Whole building

Comments: No comments from assessor

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#### This recommendation was excluded by the assessor.

**Replace high-pressure mercury discharge lamps with complete new lamp/gear SON (DL).**

Code: EPC-L6

Applicable to: Whole building

Comments: LED lighting

## Recommendations for RENEWABLES

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**Consider installing a ground source heat pump.**

Code: EPC-R1  
Applicable to: Whole building

Comments: No comments from assessor

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**Consider installing building mounted wind turbine(s).**

Code: EPC-R2  
Applicable to: Whole building

Comments:

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**This recommendation was excluded by the assessor.**

**Consider installing PV.**

Code: EPC-R4  
Applicable to: Whole building

Comments: There is already a PV system. This can be further enhanced.

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**This recommendation was excluded by the assessor.**

**Consider installing an air source heat pump.**

Code: EPC-R5  
Applicable to: Whole building

Comments: No comments from assessor

## Recommendations for ENVELOPE

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**Some floors are poorly insulated - introduce and/or improve insulation. Add insulation to the exposed surfaces of floors adjacent to underground, unheated spaces or exterior.**

Code: EPC-E1  
Applicable to: Whole building

Comments:

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**Roof is poorly insulated. Install or improve insulation of roof.**

Code: EPC-E2  
Applicable to: Whole building

Comments:

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**Some walls have uninsulated cavities - introduce cavity wall insulation.**

Code: EPC-E4  
Applicable to: Whole building

Comments:

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**This recommendation was excluded by the assessor.**

**Some windows have high U-values - consider installing secondary glazing.**

Code: EPC-E5  
Applicable to: Whole building

Comments: No comments from assessor

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**This recommendation was excluded by the assessor.**

**Some glazing is poorly insulated. Replace/improve glazing and/or frames.**

Code: EPC-E8  
Applicable to: Whole building

Comments: [No comments from assessor](#)

## Recommendations for FUEL-SWITCHING

**This recommendation was excluded by the assessor.**  
**Consider switching from oil or LPG to biomass.**

Code: EPC-F4  
Applicable to: Whole building

Comments: [No comments from assessor](#)

## Recommendations for AUXILIARY

**AUXILIARY accounts for 0.3% of the CO2 emissions**  
The overall energy performance of AUXILIARY provision is GOOD  
The overall CO2 performance of AUXILIARY provision is GOOD

There are no recommendations for AUXILIARY

## Recommendations for OTHER

There are no recommendations for OTHER