

# Learning from the past, building for the future



# A&J STEPHEN (BUILDERS) LTD ENERGY STATEMENT PHASE 1, SITE B FARQUHARSON STREET

#### **CHAPELTON OF ELSICK**

A & J Stephen (Builders) Ltd Energy Statement

#### Contents

#### 1. Introduction and Purpose

A & J Stephen (Builders) Ltd is proposing to develop Site B of the first phase of the new housing development at Chapelton of Elsick in conjunction with the Elsick Development Company (EDC) and two other house builders. Planning Condition No. 19 of the planning consent for this development requires A & J Stephen (Builders) Ltd to submit an Energy Statement (ES) for their phase of the site. Condition no. 19 states:

"Prior to the construction of any buildings within a defined phase of the development hereby approved, a finalised Energy Statement shall be submitted to and approved in writing by the Planning Authority, including the following items:

- a) Full details of the proposed energy efficiency measures and/or renewable technologies to be incorporated into the phase of the development.
- b) Calculations using SAP or SBEM methods, which demonstrate that the reduction in carbon dioxide emissions rates for the development, arising from the measures proposed, will enable the development to comply with the Council's Supplementary Planning Guidance on Carbon Neutrality in New Developments, unless otherwise agreed in writing (in this case a reduction in the predicted carbon dioxide emissions by 30% beyond the 2007 Building Regulations Carbon Dioxide Emissions Standard).

The respective phase of the development shall not be occupied unless it has been carried out in accordance with the approved details in the Energy Statement. The carbon reduction measures shall be retained in place and fully operational thereafter."

A & J Stephen (Builders) Ltd has provided the ES to satisfy condition No. 19 and as a contractual requirement of their construction contract with EDC. It covers Phase 1 of Site B. The ES defines the minimum requirements that have to be met.

# 2. Elsick Development Company (EDC), Energy Statement

Aberdeenshire Council received a copy of EDC's energy statement on 7 November 2013. Aberdeenshire Council confirmed on 5 December 2013 that this energy statement set out an acceptable approach on how the development should meet condition 19. A copy of the relevant correspondence is attached to Appendix A.

#### 3. The ES Requirements;

The SAP calculation for Plot No. 68 contained in Appendix B analyses the carbon emission rate for a typical single storey detached dwelling on our development. The calculation has been produced using The Government's Standard Assessment Procedure for Energy Rating of Dwellings (SAP 2012). It produces a predicted energy assessment based on the proposed structural fabric, heating and hot water system, ventilation, internal lighting and the preferred renewable technology to be incorporated within the dwelling. The CO2 emission rate (DER) for the proposed dwelling is 15.99 kg/m2. This equates to a reduction in carbon dioxide emissions by 45% or greater beyond the 2007 Scottish Domestic Building Standards.

4. The following elements of the building have been upgraded to allow compliance with Section 6 of the current Scottish Domestic Building Standards to reduce the overall energy consumption and CO2 emissions of the development before renewable or low carbon technologies are installed;

Lighting
Windows and Doors
Ventilation
Fabric, including roof, ground floor and external wall construction

- 5. Renewable technologies will require to be incorporated within the design of the proposed dwelling(s) for building warrant applications made post October 2015 to achieve compliance. A Building Warrant application will be made in due course.
- 6. Proposed Technologies:

Renewable technologies have been incorporated with the design of the dwelling. Solar photovoltaic panels (PV) will be installed on all of these properties to achieve compliance with the 2015 technical standards & SAP 2012.

### 7. Future Dwellings:

SAP Calculations can be provided in the future for individual plots, if required. But these will only be available once applications have been submitted for a building warrant as each SAP is plot specific.

### **APPENDIX A**

EDC Energy Statement Aberdeenshire Council letter dated 5 December 2013.

# **APPENDIX B**

Plot 68, SAP calculation