

## APPENDIX 9 – SUSTAINABILITY AND REDSILIENCE

### Some background information

Latest UK cross-party investigations (April 2016) into potential severity and effects of food security issues and other related issues

<http://limits2growth.org.uk/wp-content/uploads/2016/04/Jackson-and-Webster-2016-Limits-Revisited.pdf>

Together with a commentary on it:

<https://medium.com/insurge-intelligence/parliamentary-group-warns-that-global-fossil-fuels-could-peak-in-less-than-10-years-f0400914ed96#.jqmhj4zhs>

Food Security - Food supplies can be disrupted and will not always come from Sainsbury's

<http://www.foodsecurity.ac.uk/issue/qas.html>

Ignoring the big global issues in our NDP is to do a gross disservice to this community, our future selves and younger folk.

Climate change data indicators for climate change are far worse than even the most pessimistic models have predicted: there will be much more severe weather and disruption in the places that our food currently comes from, even if we escape such severity here

<https://www.newscientist.com/article/2084835-unprecedented-global-warming-as-2016-approaches-1-5-c-mark/>

68 Green Homes for Saffron Lane Leicester

<http://www.emhhomes.org.uk/news/green-homes-for-saffron-lane/>

<http://theoneplanetlife.com/an-urban-permaculture-passivhaus-eco-community/>

Passivhaus homes

Passivhaus is a standard for energy use in all building types. The homes will be of energy-efficient design, oriented to face south with increased south facing glass, super-insulated and with effective window shading and ventilation and moisture control, plus minimized building surface-to-volume area, protected from wind and with the cooler service spaces located on the northerly side.

The Standard requires the following:

- Space heating: less than 15 kWh/m<sup>2</sup>/yr;
- Total primary energy use (heating, hot water and electricity): no more than 120kWh/m<sup>2</sup>/yr;
- Air leakage: no more than 0.75 m<sup>3</sup>/m<sup>2</sup>hr @ 50 Pa (0.6 air changes per hour);
- The specific heat load for the heating source at the desired temperature is recommended, but not required, to be less than 10 W/m<sup>2</sup>.

Annual running costs per year for heating for a two-bedroom home will typically be just £13 per home, according to [Standard Assessment Procedure](#) software calculations (used by all developers to comply with Building Regulations). [The

majority of homes in the UK are constructed to level 3 of the [Code for Sustainable Homes](#), meaning that homes comparable to these would use about 8801kWh per year and cost £735 per year to run.]

We could additionally, as a matter of policy, expressly favour:

- Sustainable, low impact homes built with local materials to local vernacular designs
- Sustainable livelihoods;
- Reduced ecological footprint for the housing development;
- Local food and products, with opportunities for micro-enterprises/home working and employment;
- Affordable housing;
- Increased land productivity;
- Increased biodiversity at the development site;
- Increased feelings of well-being and good health from residents;
- Increased sense of community;
- Efficient sustainable use of natural, particularly local, resources.