

#UKPHC18

# Passivhaus Policy 2018

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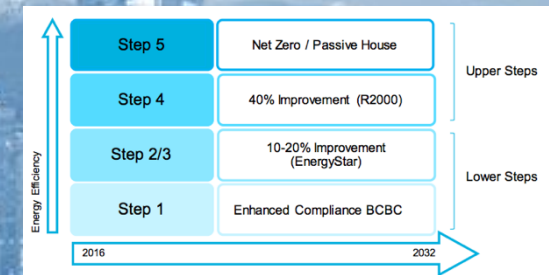


# Brussels

- 621,000 m<sup>2</sup> of buildings constructed under the BatEx scheme, over 300,000m<sup>2</sup> of this PH
- In 2012, 16% of construction activity in Brussels was Batex funded – €319M turnover and over 1200 jobs
- Batex funded PH – €1,503 per m<sup>2</sup> for standard and €1,514 for PH

# Vancouver

- Set out a series of steps that will see all new buildings being PH by 2032
- Initially voluntary ... but with the option to build to PH standard
- Space/height relaxations for PH applications



# New York

- The *One City: Built to Last* policy announced in Sep 14, with a target of reducing greenhouse gas emissions by 80% by 2050. The policy states that New York City will look to “Passive House, carbon neutral, or ‘zero net energy’ strategies to inform the standards.” In fact, Passive House is the only building energy efficiency standard noted in the plan
- 3M ft<sup>2</sup> of PH projects underway by Feb 2017

# Glasgow

- Glasgow City Council now permit Passivhaus to be used instead of the Scottish Gold Level 2 Building Regulations Standard

# Policy Activities 2017/2018

- GLA Zero Carbon Target (Consultation)
- London Environmental Strategy (Consultation)
- Manchester Green Summit & Springboard to a Green City
- Leeds Climate Commission
- Welsh National Assembly Low Carbon Housing challenge (Consultation)
- Welsh Government Low Carbon Housing Plan (Select Committee)
- Input to BEIS Building for 2050 project
- Input to include Passivhaus in UKGBC Sustainable Housing Standards
- A Low Carbon Pathway for Wales (Consultation)
- Scottish Building Regulations Call for Evidence (Consultation)
- BEIS: Building a Market for Energy Efficiency (Individual Response)
- Energy Performance Certificates in Buildings (Consultation)
- BEIS – Building Mission
- Part L consultation

# Two main opportunities

- 1. The Building Mission Challenge**
- 2. The Zero Carbon Challenge**

# The Building Mission Challenge



Department for  
Business, Energy  
& Industrial Strategy

Policy paper

## The Grand Challenges

Updated 21 May 2018

### **Mission: At least halve the energy use of new buildings by 2030**

Heating and powering buildings accounts for 40% of our total energy usage in the UK. By making our buildings more energy efficient and embracing smart technologies, we can cut household energy bills, reduce demand for energy, and boost economic growth while meeting our targets for carbon reduction.

For homes this will mean halving the total use of energy compared to today's standards for new build. This will include a building's use of energy for heating and cooling and appliances, but not transport.





# The Challenge – in summary ...



New Build – at least halve the energy use of new buildings by 2030

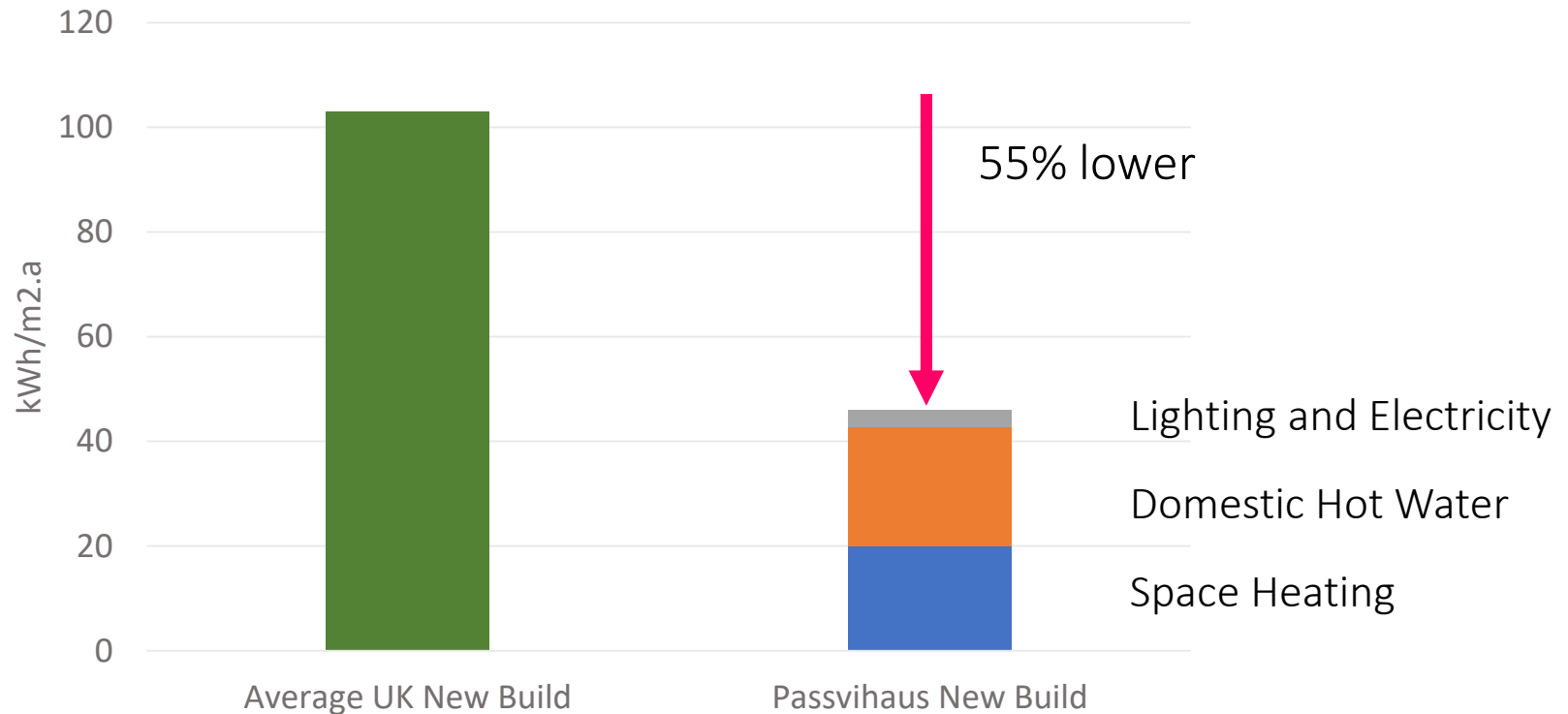


Retrofit – need new policies to dramatically reduce current emissions to meet 2032 and 2050 carbon targets – i.e. reductions of at least 50%.



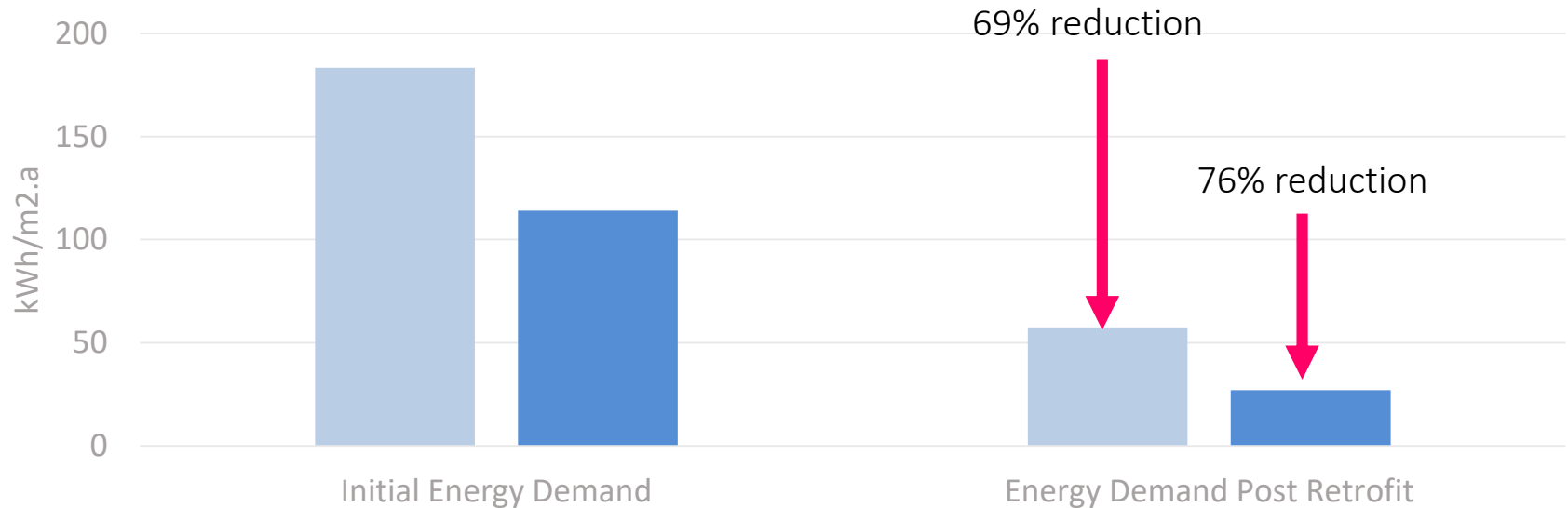
# Passivhaus Energy Use

Predicted Total Energy Use for New Build Dwellings



# Passivhaus Retrofit

## Large Retrofit Examples – Primary Energy



### Example 1

Cedar Court, Glasgow – complete refurbishment of an 8000m<sup>2</sup> tower block



### Example 2

Erneley Close, Manchester - Regeneration of two blocks of flats in one of the poorest parts of Manchester

