

NATIONAL  
ENERGY  
FOUNDATION

*improving the use of  
energy in buildings*

# HOUSING: REFURB INITIATIVES

*Innovation for Decarbonisation*

*7<sup>th</sup> March 2016*

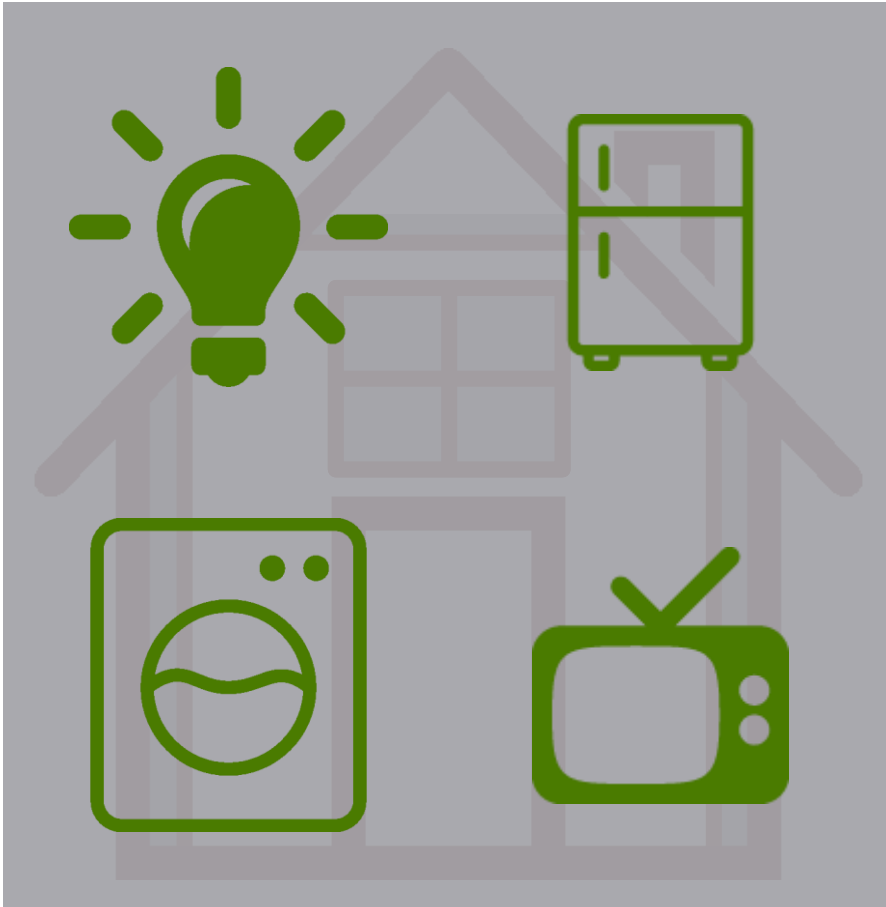
**THOMAS WHIFFEN**  
**Senior Energy Specialist**

# CURRENT STATE OF HOUSING REFURB



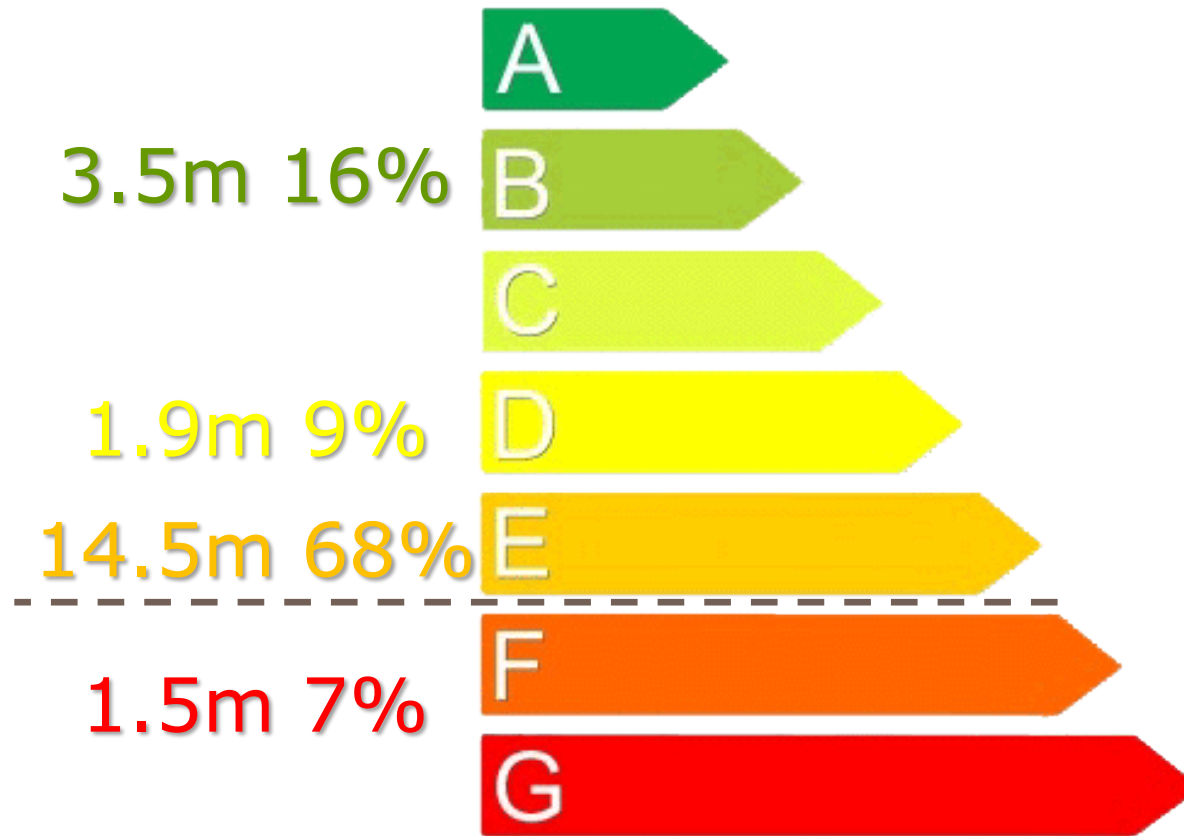
- QUICK WINS WIDELY INSTALLED:

# CURRENT STATE OF HOUSING REFURB



- QUICK WINS WIDELY INSTALLED:
  - DOUBLE GLAZING
  - LOFT INSULATION
  - CAVITY WALL INSULATION
  - ELECTRICAL APPLIANCE EFFICIENCY UPGRADE

# CURRENT STATE OF HOUSING REFURB



DATA FROM NEF'S REFURBISHMENT AS A  
MANUFACTURING INDUSTRY (REMI) PROJECT

7<sup>th</sup> March 2016  
HOUSING: REFURB INITIATIVES

# OPPORTUNITIES FOR HOUSING REFURB



- WHOLE HOUSE  
RETROFIT
- ASSURED  
PERFORMANCE  
(DESIGNED AND TESTED)
- SECURE FINANCE
- OFFSITE  
MANUFACTURING

# CHALLENGES FOR HOUSING REFURB



- EVERY HOUSE IS DIFFERENT
- SOLUTIONS:
  - BESPOKE
  - SCALABLE
  - REPLICABLE
  - PERFORMANCE GUARANTEED

# NEF INITIATIVES

- REFURB PROGRAMMES:
  - GREEN DEAL COMMUNITIES PROGRAM
  - BETTER HOUSING, BETTER HEALTH
- BESPOKE IWI: WHISCERS
- DESIGN GUIDANCE: ASSURED PERFORMANCE PROCESS
- TESTING: PULSE
- WHOLE HOUSE RETROFIT + PERFORMANCE GUARANTEE: ENERGIESPRONG