

Housing retrofit: scale and quality through market transformation

Gavin Killip

Environmental Change Institute

University of Oxford



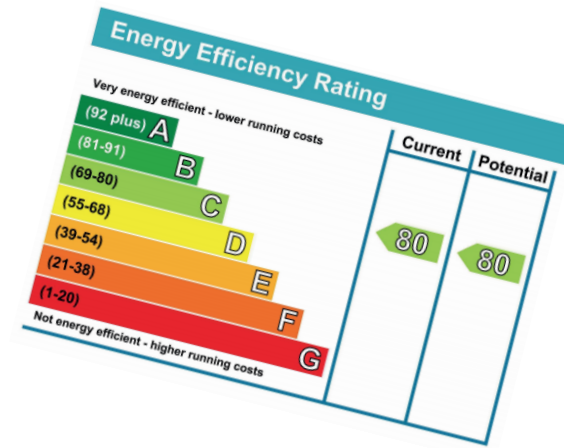
Benefits of retrofit

- ▶ Economic
 - ▶ Create jobs, all regions
 - ▶ Increase labour productivity
- ▶ Social
 - ▶ Improve health and well-being
 - ▶ Eradicate fuel poverty
- ▶ Environmental
 - ▶ Help reach zero carbon targets
 - ▶ Facilitate energy system change

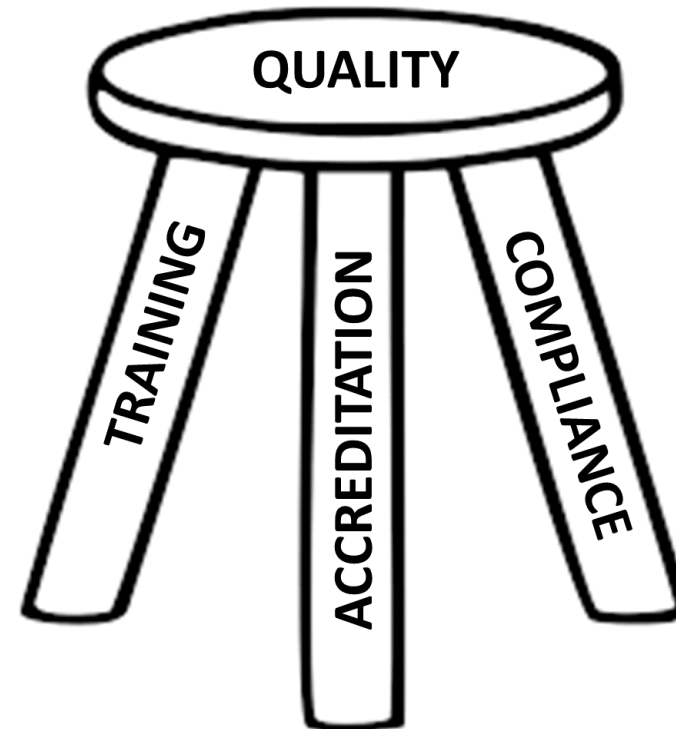
Market opportunities for retrofit

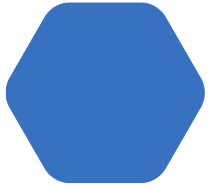
- ▶ UK has about 28 million homes
- ▶ UK spends £25-30bn pa on housing repair, maintenance and improvement (RMI)
- ▶ About 40% of RMI total (~£10bn+) is good opportunity for retrofit
- ▶ Retrofit can be done all at once or phased over time
- ▶ Doing retrofit alongside RMI works has huge benefits:
 - ▶ Minimise cost
 - ▶ Minimise disruption
- ▶ Key challenge: how to ensure that opportunities are taken, not wasted?

Market transformation



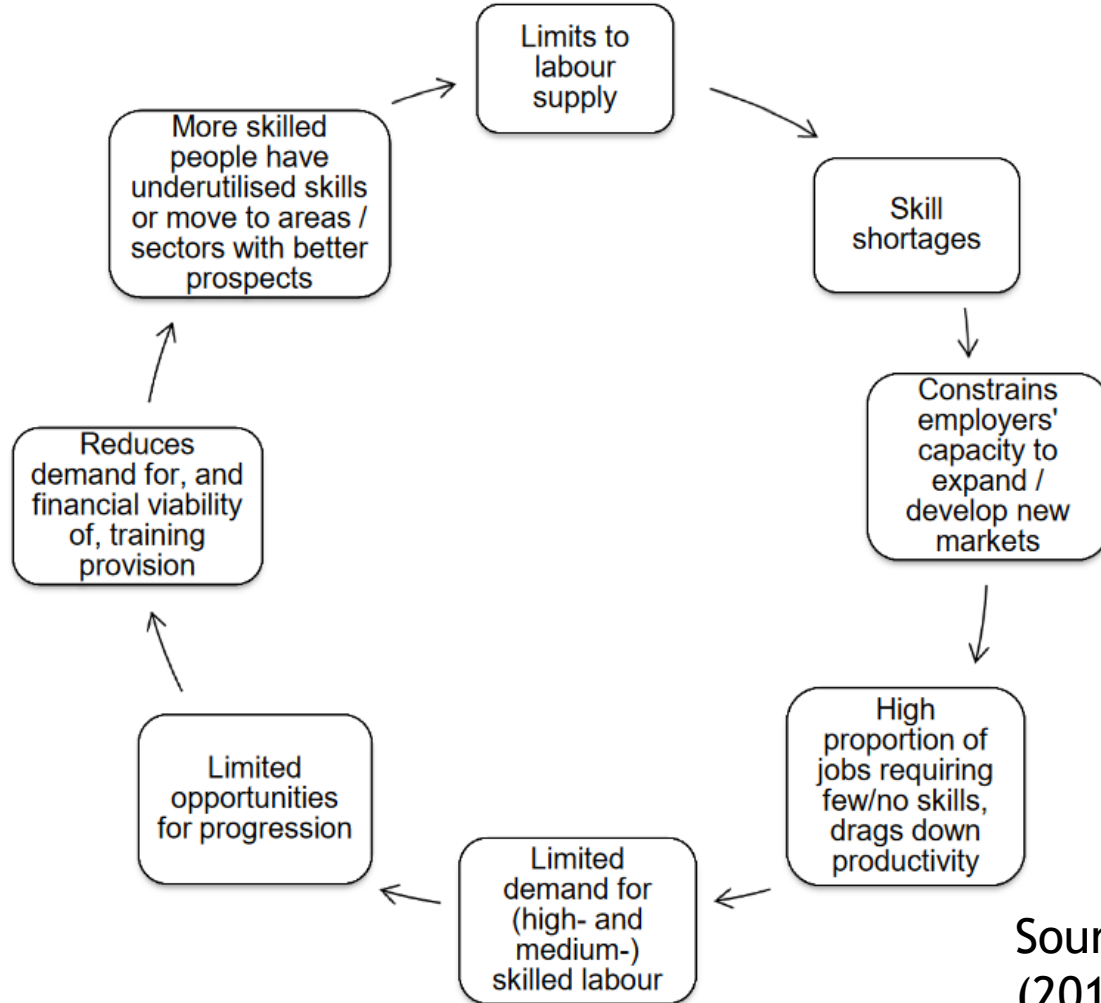
- ▶ Understand the market first
- ▶ Engage with industry through trade bodies
- ▶ Set the industry stretching targets
 - ▶ Minimum energy performance standards
 - ▶ Minimum occupational standards
- ▶ Increase the targets over time
- ▶ Strengthen compliance-checking
- ▶ Re-organise vocational education & training
- ▶ Ban rental or sale of property by EPC band
- ▶ Make £ available (eg 0% loans, grants)



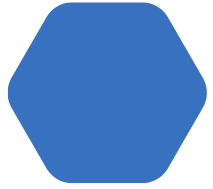


Market reality 1: The low-skills equilibrium

Figure 2: The 'low skills trap' and economic development



Source: Green (2016)



Market reality 2: the rise of self-certification

- ▶ Government (then DCLG) first allowed windows installers to certify their own work in the mid 2000s
- ▶ They had realised that there was not enough capacity in local authority Building Control to cope with volumes
- ▶ Trustmark is now the body licenced by government as the umbrella body for industry self-certification schemes
- ▶ Anyone can propose a scheme
- ▶ There are currently 39 schemes
- ▶ Consumer and installer confusion is rife
- ▶ Self-certification = a clear conflict of interest



Market reality 3: inadequate compliance & Building Control

- ▶ Local authority Building Control suffers from inadequate resources, workload pressures and low morale
- ▶ The Building Control function is now open to competition from private sector operators
 - ▶ = conflict of interest
- ▶ A study in the mid 2000s found that buildings were only every denied a certificate for 2 reasons:
 - ▶ Fire safety or structural safety
 - ▶ Even those have been eroded (cf. The Hackitt Review of the Grenfell Tower fire)
 - ▶ Energy performance has never been a cause for sanctions



A possible way forward

- ▶ Introduce labour market regulation: construction firm directors must have training and accreditation
- ▶ Announce future minimum standards for buildings - ban sales/rentals of unfit homes (based on EPC bands)
- ▶ Set up a national bank to provide finance and de-risk private investment
- ▶ Introduce occupational standards for construction workers
- ▶ Reform training - content and governance
- ▶ Invest in local authority Building Control to conduct tighter compliance checks
- ▶ Set up a national retrofit body to coordinate action through a programme of innovation field trials (testing new processes and practices, not just products)
- ▶ Use the lessons learned to set & tighten standards over time