

# Heating Buildings

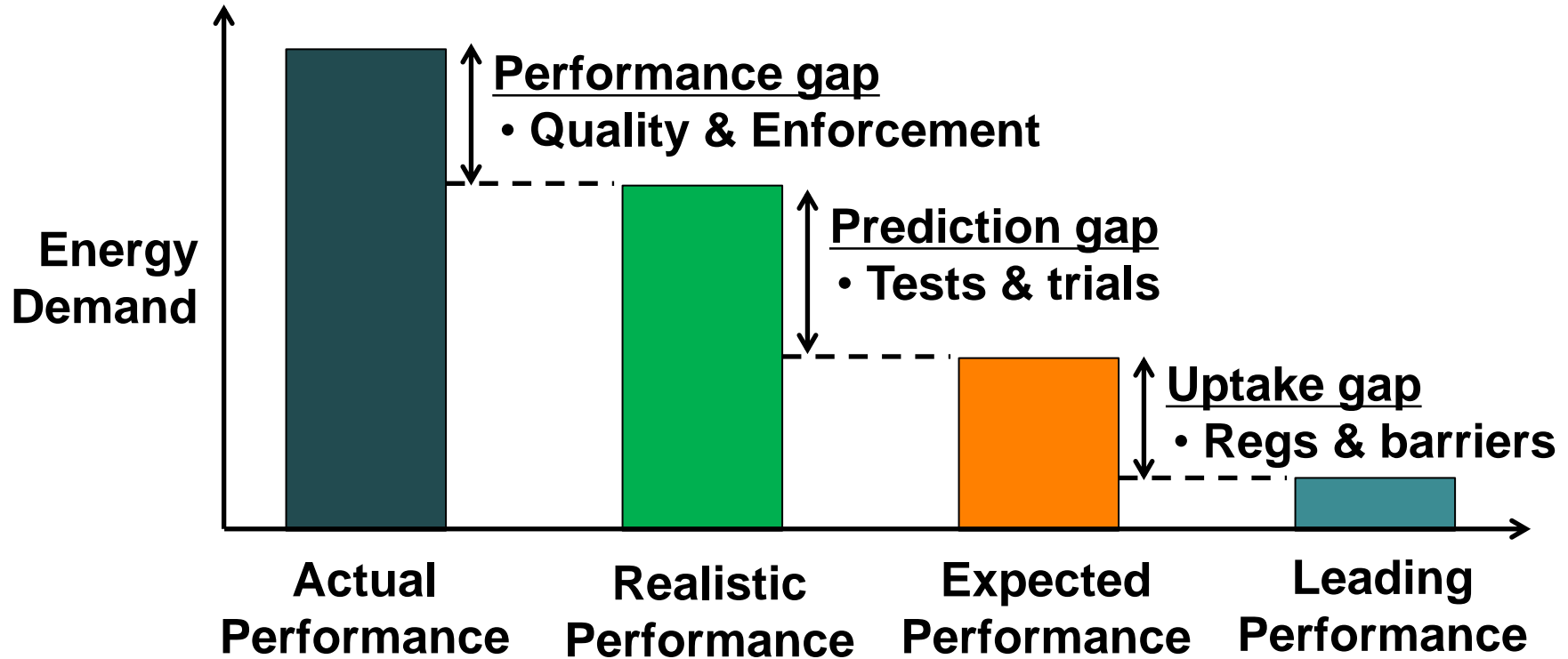
## Reducing energy demand and GHG emissions



*ERP report presentation  
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[www.erpuk.org/buildings](http://www.erpuk.org/buildings)

# Heat demand reduction is not fully exploited



# Uptake – new-build and retrofit

- 1. To guide buildings' energy policies and regulations to be commensurate with the UK's Carbon Budgets***
  - a cross-departmental group should be established with membership from DCLG, BEIS, and relevant organisations (e.g. National Infrastructure Commission)***
  - aided by the establishment of an expert advisory panel.***

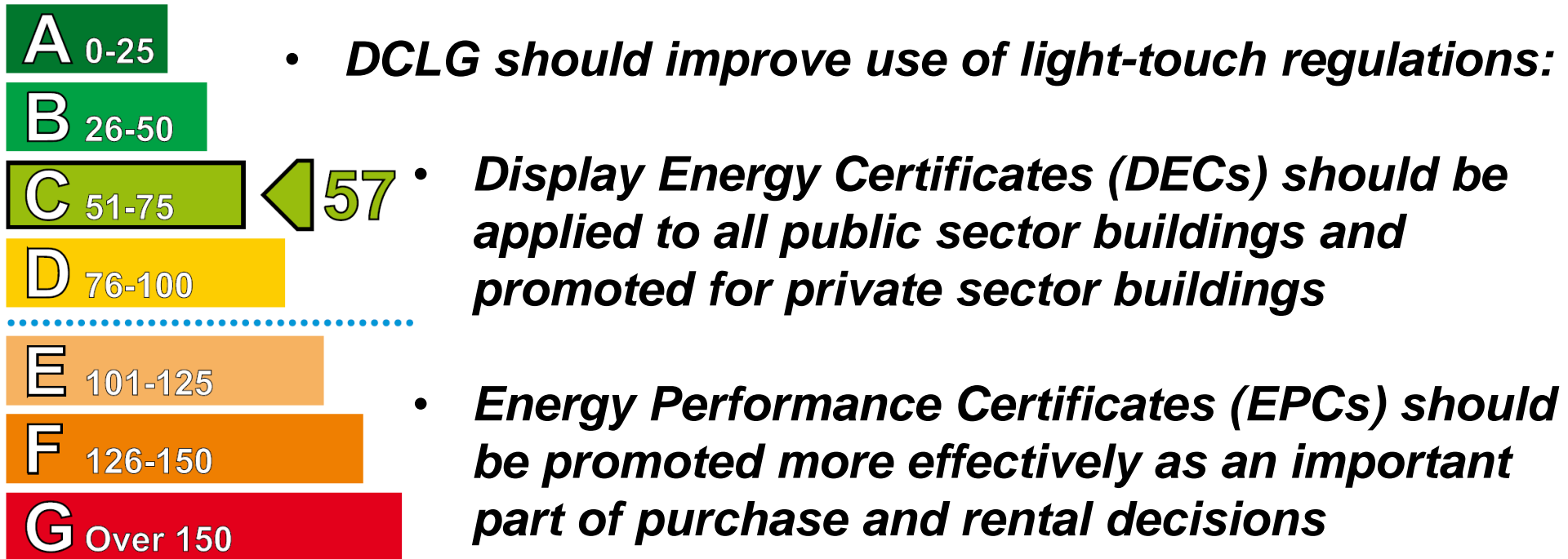
# Uptake – new-build

***2. To provide ambition and certainty for the building industry:***

- ***DCLG should***
  - ***produce a regulatory trajectory for building energy regulations that reaches leading performance in fabric thermal efficiency***
  - ***maintain this trajectory***

# Uptake – new and retrofit

## 3. To leverage customer action on energy efficiency:



## Uptake - retrofit

4. *To increase uptake of retrofit solutions:*

- *product manufacturers / installers should better promote options and develop more appealing products, methods and “retrofit packages”*
- *support from heritage groups for older buildings*
- *government engagement for policy development and implementation*



Source: Spacia, Pilkington



Source: Q-Bot



Source: Energiesprong

## Prediction

### ***5. To increase understanding of heat use in buildings:***

- ***Energy Systems Catapult (ESC) should:***
  - ***expand its network for access to test facilities and expertise to include tests of thermal performance***
  - ***maintain its buildings trials as a longitudinal study and control group for other studies***



## Performance

### ***6. To improve thermal performance in practice:***

- product manufacturers should take a greater role in training and quality control in installation***
- building inspection regime should improve its use of tests & enforcement***
  - better (not necessarily more) regulation***
  - truly random spot checks***





## Summary

**Uptake must be continue and be increased:**

- **Continue with measures known to bring benefits**
- **Develop / promote new products, methods & services**

**Prediction can be improved by:**

- **Research to close knowledge gaps, from fundamentals to in-use**
- **Treating early deployment as “safe learning environment”**

**Performance can be improved by:**

- **Training and quality control supported by supply chain**
- **Better regulation**
- **Increased customer awareness, supported by easier tests**