

# ISSUES FOR OFF- GAS DOMESTIC PORTFOLIO OWNERS

Matthew O'Connell  
CLA housing adviser



# About the CLA

---

- The Country Land and Business Association (CLA) is the membership body for owners of land and rural businesses in England and Wales
- CLA members represent around 40% of privately rented property in rural areas
- Half of our members own listed property

# Issues for off-grid domestic portfolio owners

---

- Why is off-gas a challenge
- Current regulations, Clean growth strategy and MEES trajectory
- Case study
- Lessons

# Fuelling uncertainty

## Summary of this home's energy performance related features

Element	Description	Energy Efficiency
Walls	Solid brick, as built, no insulation (assumed)	★☆☆☆☆
Roof	Pitched, 250 mm loft insulation	★★★★☆
Floor	Solid, no insulation (assumed)	—
Windows	Fully double glazed	★★★★☆
Main heating	Boiler and radiators, mains gas	★★★★☆
Main heating controls	Programmer, room thermostat and TRVs	★★★★☆
Secondary heating	Room heaters, wood logs	—
Hot water	From main system	★★★★☆
Lighting	Low energy lighting in all fixed outlets	★★★★★

Current primary energy use per square metre of floor area: 313 kWh/m<sup>2</sup> per year

# Fuel Type

---

Fuel Type	Energy efficiency rating	Environmental Impact Rating	Energy cost over 3 years (£)
Mains Gas	56 (D)	58	3258
Oil	43 (E)	43	3,003
Bulk LPG	30 (F)	54	4494
Coal	20 (G)	1	6699
Bottled LPG	18 (G)	54	6354

# Recommended measures

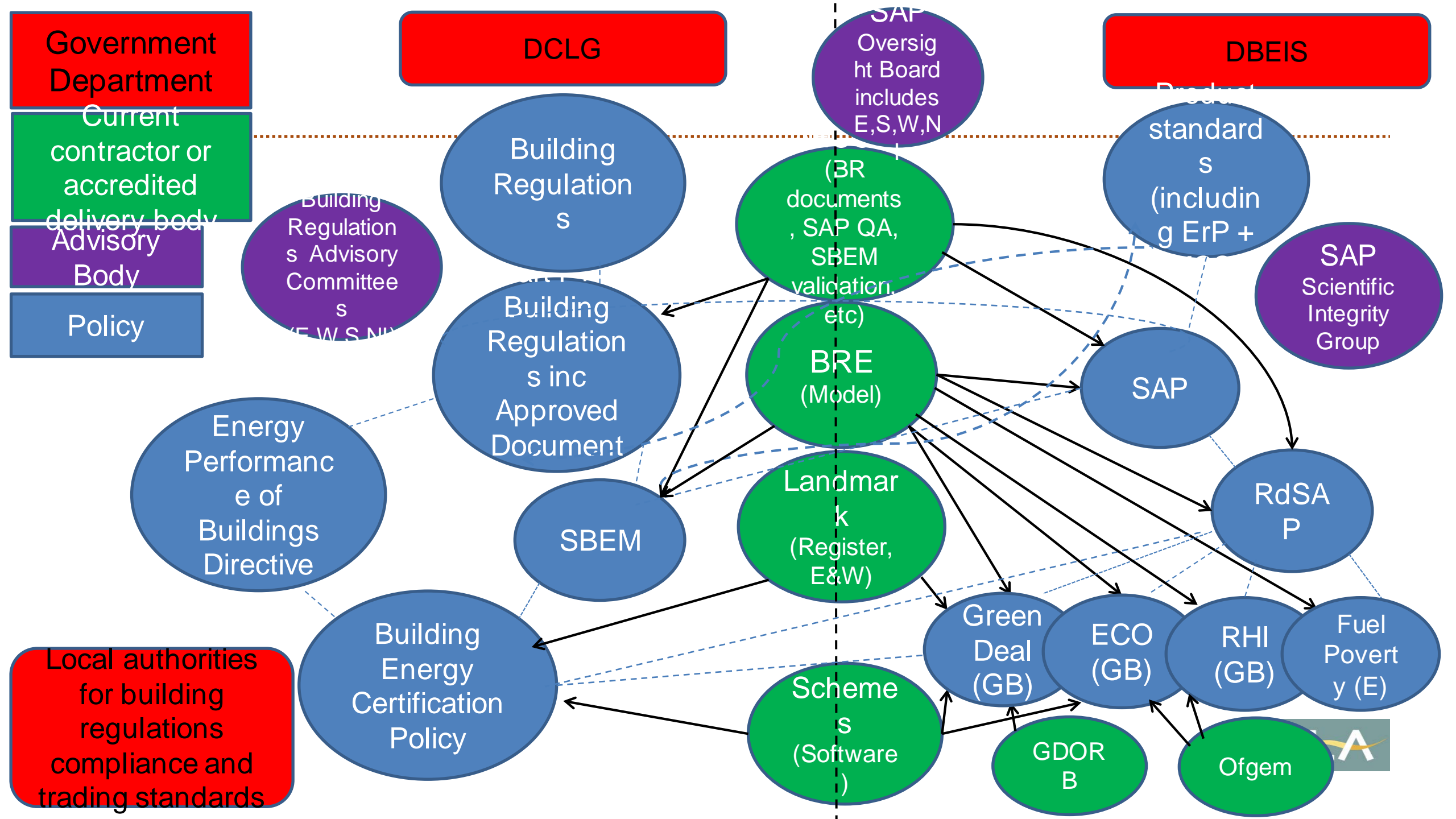
---

Recommended measures	Indicative cost	Typical savings per year	Rating after improvement
Internal or external wall insulation	£4,000 - £14,000	£ 361	D64
Floor insulation (solid floor)	£4,000 - £6,000	£ 48	D67
Solar water heating	£4,000 - £6,000	£ 30	C69
Solar photovoltaic panels, 2.5 kWp	£5,000 - £8,000	£ 308	C79
Wind turbine	£15,000 - £25,000	£ 592	A99

# Issues

---

- Reputational issues – rolling exemptions
- Fuel type and renewables – significant capital expenditure
- Ability to front load cost cap contributions
- Is the EPC rating the be all and end all of retrofit?





# Farm Workers Cottage

---




- AHA
- Employee retired
- Fire and plug in electric heaters
- Farm tenant letting to new employee on AST 2018
- Triggered EPC and MEES

# Farm Workers Cottage

---

- Responsibility with the farm tenant, but wanted to assist him through the process. Some aspects could also fall to landlord.
- Met tenant with EPC assessor and considered:
  - No gas available
  - Oil / LPG
  - Modern NSH with Economy 7
  - Solar PV
  - Air source heat pump
  - Double glazing
  - Insulation
  - LED lights
  - What would work for the tenant

# Farm Workers Cottage G7 – E47

**Energy Performance Certificate** 

**2 Manor Farm Cottages, Lower Street, Curry Mallet, TAUNTON, TA3 6TD**


Dwelling type: Semi-detached house      Reference number: 0956-2894-7639-9008-3965  
 Date of assessment: 04 July 2018      Type of assessment: RdSAP, existing dwelling  
 Date of certificate: 09 July 2018      Total floor area: 84 m<sup>2</sup>

Use this document to:

- Compare current ratings of properties to see which properties are more energy efficient
- Find out how you can save energy and money by installing improvement measures

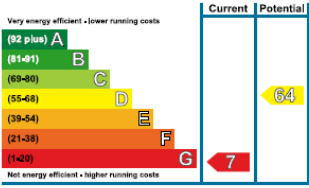
Estimated energy costs of dwelling for 3 years:	£ 8,184
Over 3 years you could save	£ 3,546

**Estimated energy costs of this home**

	Current costs	Potential costs	Potential future savings
Lighting	£ 312 over 3 years	£ 180 over 3 years	
Heating	£ 6,573 over 3 years	£ 3,933 over 3 years	
Hot Water	£ 1,299 over 3 years	£ 525 over 3 years	
<b>Totals</b>	<b>£ 8,184</b>	<b>£ 4,638</b>	

These figures show how much the average household would spend in this property for heating, lighting and hot water and is not based on energy used by individual households. This excludes energy use for running appliances like TVs, computers and cookers, and electricity generated by microgeneration.

**Energy Efficiency Rating**




The graph shows the current energy efficiency of your home. The higher the rating the lower your fuel bills are likely to be. The potential rating shows the effect of undertaking the recommendations on page 3. The average energy efficiency rating for a dwelling in England and Wales is band D (rating 60). The EPC rating shown here is based on standard assumptions about occupancy and energy use and may not reflect how energy is consumed by individual occupants.

**Top actions you can take to save money and make your home more efficient**

Recommended measures	Indicative cost	Typical savings over 3 years
1 Increase loft insulation to 270 mm	£100 - £350	£ 183
2 Cavity wall insulation	£500 - £1,500	£ 1,431
3 Party wall insulation	£300 - £600	£ 135

See page 3 for a full list of recommendations for this property.

To find out more about the recommended measures and other actions you could take today to save money, visit [www.gov.uk/energy-grants-calculator](http://www.gov.uk/energy-grants-calculator) or call 0300 123 1234 (standard national rate). The Green Deal may enable you to make your home warmer and cheaper to run.

**Energy Performance Certificate** 

**2 Manor Farm Cottages, Lower Street, Curry Mallet, TAUNTON, TA3 6TD**


Dwelling type: Semi-detached house      Reference number: 0956-2898-7689-9008-7975  
 Date of assessment: 08 August 2018      Type of assessment: RdSAP, existing dwelling  
 Date of certificate: 09 August 2018      Total floor area: 84 m<sup>2</sup>

Use this document to:

- Compare current ratings of properties to see which properties are more energy efficient
- Find out how you can save energy and money by installing improvement measures

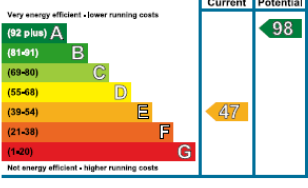
Estimated energy costs of dwelling for 3 years:	£ 3,879
Over 3 years you could save	£ 1,440

**Estimated energy costs of this home**

	Current costs	Potential costs	Potential future savings
Lighting	£ 201 over 3 years	£ 201 over 3 years	
Heating	£ 2,505 over 3 years	£ 1,455 over 3 years	
Hot Water	£ 1,173 over 3 years	£ 783 over 3 years	
<b>Totals</b>	<b>£ 3,879</b>	<b>£ 2,439</b>	

These figures show how much the average household would spend in this property for heating, lighting and hot water and is not based on energy used by individual households. This excludes energy use for running appliances like TVs, computers and cookers, and electricity generated by microgeneration.

**Energy Efficiency Rating**



The graph shows the current energy efficiency of your home. The higher the rating the lower your fuel bills are likely to be. The potential rating shows the effect of undertaking the recommendations on page 3. The average energy efficiency rating for a dwelling in England and Wales is band D (rating 60). The EPC rating shown here is based on standard assumptions about occupancy and energy use and may not reflect how energy is consumed by individual occupants.

**Top actions you can take to save money and make your home more efficient**

Recommended measures	Indicative cost	Typical savings over 3 years
1 Cavity wall insulation	£500 - £1,500	£ 672
2 Floor insulation (solid floor)	£4,000 - £6,000	£ 162
3 Draught proofing	£80 - £120	£ 45

See page 3 for a full list of recommendations for this property.

To find out more about the recommended measures and other actions you could take today to save money, visit [www.gov.uk/energy-grants-calculator](http://www.gov.uk/energy-grants-calculator) or call 0300 123 1234 (standard national rate). The Green Deal may enable you to make your home warmer and cheaper to run.

- LED lights
- Loft insulation to 270mm
- Air source heat pump with new wet system

# Farm Workers Cottage

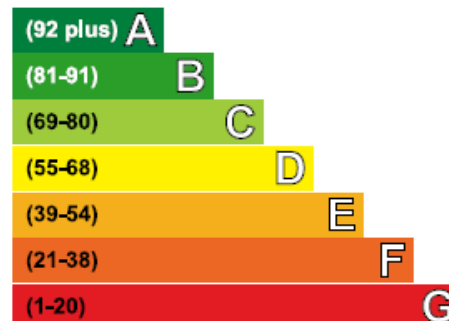
---

- Oil combi system = £9,892.60 plus VAT
- Quantum heat pump system = £8,702.50 plus VAT
- RHI £1,979 pa over 7 years (on total investment of £10,850) gave an IRR of 6.5% (18.24% interest)
- Cavity wall insulation – RHI: Ofgem requested as it was recommended on the EPC. Independent surveyor agreed not recommended.

# Points mean prizes! G7 – E47 – C69?

- ✓ LED lights = 1pt
- ✓ Loft insulation 270mm = 4pts
- ✓ Air source and plumbing = 35pts
- Solar thermal = 2pts
- PV = 11pts
- Full double glazing (already part) = 1pt
- × Cavity wall insulation = 9pts
- × Floor insulation = 3pts
- × Draught proofing = 1pt
- × Wind turbine = 21pt
- Oil condensing combi boiler = 41pts
- Standard automatically controlled NSH on Economy 7 = 21pts
- Upgrade NSH in living room to high heat retention = 1pt
- Dual immersion water heater = 8pts

Very energy efficient • lower running costs



Not energy efficient • higher running costs

# Lessons learnt

---

- Consider being proactive
- Engage with any tenant early, can be disruptive and take time
- Be aware of legal framework and SAP assessment
- Consider all possibilities
  - Intelligent NSH can work with Economy 7
  - Some options have a surprisingly poor EPC affect
  - Don't have to do works in all rooms, effective if hit high usage parts of a house
  - Consider more control / different brands
- Use a good EPC assessor and build a relationship with them
  - Do draft EPCs, discuss the effects options have vs cost, discuss options that are not suitable
- Effects on older property – lack of airflow, aesthetics
- Different assessment for commercial vs residential (Co2 vs £)
- Remember EPCs last 10yrs

# THANK YOU

16 Belgrave Square

London SW1X 8PQ

Tel: 020 7235 0511

Fax: 020 7235 4696

Email: [mail@cla.org.uk](mailto:mail@cla.org.uk)

[www.cla.org.uk](http://www.cla.org.uk)

