

**Neil**



## Historic building

### Property

Detached house, part timber frame, part brick, dating originally from c.1570

### Primary heating source pre-installation

Oil-fired central heating

### Secondary heating source

New, very efficient low emission woodburner in lounge

### Energy efficiency / renewable energy installation

Air source heat pump. Since supplemented with new double glazing and 5.95kW solar panels plus 13.5kW battery

### Approximate total cost of install

Heat pump total cost, including 2 larger radiators £16,900

### Value and source of grant funding or subsidy accessed

Renewable Heat Incentive funding, paid quarterly, approximately £13,000 in total over 7 years

### Estimated payback period

Currently expected to be within 5 years for the heat pump, not including the further savings from solar energy. Zero net energy bills should now be possible

EPC Rating  
Pre-installation

**E**

EPC Rating  
Post-installation

**C**

Annual energy  
bill saving\*

**£1,100**

\* Approximate annual saving.



**David**

## **New build: solar PV & battery**



### **Property**

**Detached 3 bed, 2021**

### **Primary heating source pre-installation**

**Modern gas boiler for heating & direct hot water with immersion option**

### **Secondary heating source**

**None**

### **Energy efficiency / renewable energy installation**

**Air source heat pump. 8.12kWp of solar PV and 9.6kW of battery storage**

### **Approximate total cost of install**

**£21,840**

### **Value and source of grant funding or subsidy accessed**

**£5,000 from Boiler Upgrade Scheme voucher**

### **Estimated payback period**

**5-6 years. Other benefits such as a quiet cosy home 24/7 and no stressing about large gas bills**

**EPC Rating  
Pre-installation**

**B**

**EPC Rating  
Post-installation**

**A**

**Annual energy  
bill saving\***

**£2,800 –  
£3,000**

\* No gas bill and annual electricity bill is a refund of approximately £500.



**Linda**

**1930s detached**



**Property**

**1930's detached house with pebble dash render**

**Primary heating source pre-installation**

**Gas-fired central heating**

**Secondary heating source**

**Woodburning stove in sitting room**

**Energy efficiency / renewable energy installation**

**External wall insulation and new double glazed UPVC windows;  
increased the solar PV array**

**Approximate total cost of install**

**New windows and sills installed approx. £900 per window. External  
insulation worked out at £140 per sqm. Solar PV 3.32kW £4,490**

**Value and source of grant funding or subsidy accessed**

**None**

**Estimated payback period**

**Solar PV: 7 years. Insulation: 15 years**

**EPC Rating  
Pre-installation**

**F**

**EPC Rating  
Post-installation**

**B**





**Johnathan**

**Recent build: full upgrade**



**Property**

**Detached post-2000**

**Primary heating source pre-installation**

**Oil-fired central heating**

**Secondary heating source**

**Electric log-burner effect small stove**

**Energy efficiency / renewable energy installation**

**Solar PV system (10.5kWp) with battery storage and solar diverter for water heating; air source heat pump and larger radiators; EV charger**

**Approximate total cost of install**

**£30,000**

**Value and source of grant funding or subsidy accessed**

**£5,000 from Boiler Upgrade Scheme voucher**

**Estimated payback period**

**13 years after taking loan financing (via green mortgage extension) into account**

**EPC Rating  
Pre-installation**

**D**

**EPC Rating  
Post-installation**

**A**

**Annual energy  
bill saving\***

**£2,500**

\* Expected annual saving.