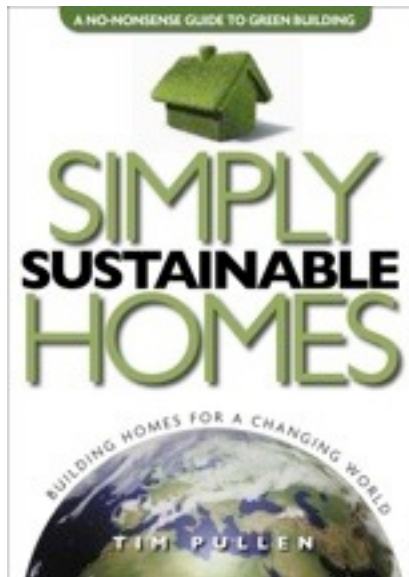


# **HOMEBUILDING & RENOVATING**

*The UK's no 1 Selling Self-Build & Renovation Magazine*



## Wood Burning Stoves

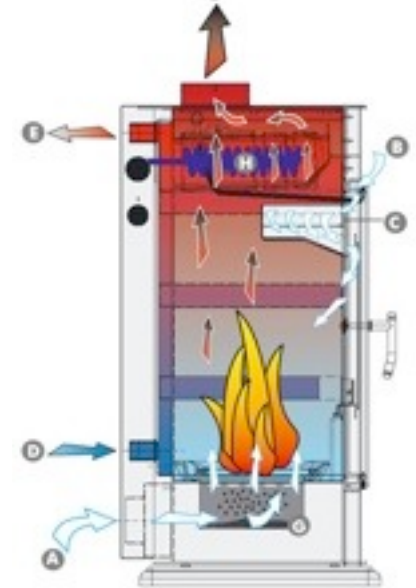


### Tim Pullen

H&R Magazine Eco-Expert  
Author – Simply Sustainable Homes  
Sustainable Building Consultant

# Types of Wood Burning Stove

- Log Burner
- Log burner with back boiler
- Pellet burner with back boiler
- Range stove with back boiler



# Potential Contribution

## Space heating for a 200m<sup>2</sup> house

Built to current Building Regs Part L standard

55kWh/m<sup>2</sup> = 11,000 kWh p.a.

From 10% to

100% contribution

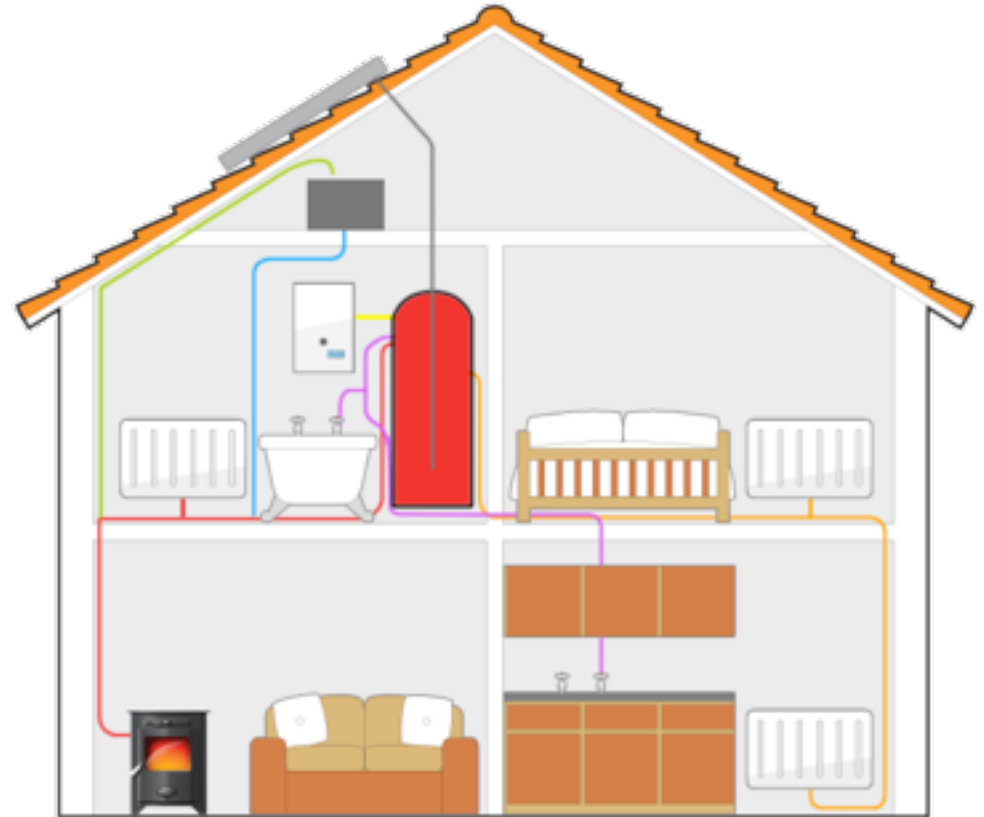


**Effective top-up to other renewable energy system**

# Integrating to heating system

Integration needs :-

- Hetas engineer
- Multi-coil cylinder
- Adequate controls



**Well insulated house may not need the gas boiler**

# Building Regs Requirements

## Building Regs AD-J covers

- **Hearths**
- **Flues**
- **Height of flue above roof**
- **Ventilation**
- **CO Alarm**
- **Connection to unvented cylinder**

**HETAS approved installer  
can self-certify**



# Efficiency of log burners

**Stove efficiency can be over 80%**

**Pellet boilers can be over 90%**

**Output figures may not match actual output.**

**A stove boiler giving 9kW to the boiler side  
may give 4kW to the room side.**



**A 5m x 5m room to current building regs only needs 1.2kW**

**If the room is comfortable the boiler only has 3kW**

**Design criterion or as top-up**

- Starts autumn 2012
- Biomass boilers are eligible
- Log burning stoves not eligible
- Tariff yet to be announced – could be 9p/kWh
- Grants for boilers – RHPPS - £950
- RHPPS not available if replacing gas

**Cost of stove boiler - £3,000 to £4,000**

**Less RHPPS grant - £950**

**Assume 9,000kWh from boiler**

**Cost of fuel - £150 to £400 per year**

**RHI returns –  $9,000 \times 9p = £810$  per year**



## Cheap Fuel

1.6p to 4.5p per kWh

## RHI changes the game

**Integrated systems can generate income**

## 100% contribution

**Designed into a well insulated home**

## **Stoves Online**

[www.stovesonline.co.uk](http://www.stovesonline.co.uk)

## **Energy Saving Trust**

[www.energysavingtrust.org.uk/Generate-your-own-energy/  
Wood-fuelled-heating](http://www.energysavingtrust.org.uk/Generate-your-own-energy/Wood-fuelled-heating)

## **Renewable Heat Incentive**

[www.rhincntive.co.uk/](http://www.rhincntive.co.uk/)