Issue 9, July 2008

Good Practices for Equipment & Installers
The Installers' Newsletter

Greener Home Scheme Phase III

Minister for Communications, Energy and Natural Resources, Eamon Ryan T.D. announced on July 7th 2008 that the Greener Homes Scheme (GHS), having made over 22,000 grant commitments to householders towards the installation of new renewable energy heating systems, would move immediately to Phase III of the scheme. The announcement of Phase III is timed to coincide with the recent coming into force of the revised Building regulations 2008 which for the first time see a compulsory requirement for some component of renewable energy in all new homes.

The scheme has proven very popular and of the 22,000 grant offers in place, already 13,000 of them have been paid following the successful installation of the systems. This has resulted in annual reduction of 33,000 tonnes of CO2 emissions. The applications are split across the three technologies: Biomass (26%), Heatpump (26%) and Solar Thermal (48%). Phase III of the scheme is now open as of the 22nd of July 2008.

There will be a number of changes to the scheme;

1. **Existing dwellings only will be supported**
2. **Wood gasification boilers are introduced**
3. **Biomass grant levels have been adjusted**

Existing Dwellings

Under Phase III of the Greener Homes Scheme only existing dwellings will be eligible to apply for a grant. Any dwelling under 1 year old and/or that has not been occupied for at least a year will not be eligible for support.

An existing dwelling;

- Has been occupied for a minimum of one year
- Has an existing heating system

The installing engineer is required to vouch for the age of the house at time of commissioning. For verification purposes SEI's QA programme involves site visits at which time the stated age of the house can be established.

If incorrect information is provided on the commissioning report regarding the property's age, this will be treated as fraudulent activity and your registration on the Greener Homes Scheme Registered Installer List will be subject to review.

Wood Gasification Boiler

A wood gasification boiler, which is now eligible under the scheme, is a central heating boiler which produces its useful heat through combustion of wood gas. This "generator" gas is produced by the thermal transformation of wood fuel i.e. the wood fuel is first converted to gas then the resulting charcoal is then also converted to gas.

A wood gasification boiler differs from a standard wood boiler by way of the combustion process. In a standard wood boiler, direct combustion of the wood fuel takes place, whereas in a wood gasification boiler, combustion of wood-gas takes place following thermal conversion of the wood fuel to gas.

There will be a separate Wood Gasification Boiler Registered Installer List and Product List. Each registered wood gasification boiler will have a corresponding list of Installers who are deemed competent by the product supplier in the installation and commissioning of that product. Installers who wish to be registered on the Wood Gasification Registered Installer List must have completed an accredited biomass training course and must submit an application for registration containing a declaration completed by the Irish agent for that product.

Phase III Grant levels

The following are the grant levels for Phase III of the Greener Homes Scheme.

Technology	Phase III
Biomass - Boiler	€2,500
Wood Gasification Boiler	€2,000
Biomass - Stove w/Back boiler	€1,400
Biomass - Stove	€800
Heat Pump – Vertical ground	€3,500
Heat Pump – Horizontal ground	€2,500
Heat Pump - Water to water	€2,500
Heat Pump - Air Source	€2,000
Solar - Flat Plate	€250/m^2
Solar - Evacuated Tube	€300/m^2

Sustainable Energy Ireland, Greener Homes Scheme, Glasnevin, Dublin 9.
T: 1850 734 734, F: (01) 808 2013 Web: www.sei.ie Email: greenerhomes@sei.ie

Scheme Terms and Conditions

Please ensure that your client is compliant with the following eligibility criteria when filling out their application form:

- **Grant eligibility commences with the launch of Phase III of the Scheme on the 22nd July 2008. If any product procurement or work was initiated prior to this date then you are not eligible to apply for a grant. (Product Procurement includes any form of ordering, deposit and/or stage payment as well as product delivery. Work includes any installation relating to the Renewable Heating System being applied for under the Greener Homes Scheme).**
- **No purchase or work should be initiated before receiving a formal Letter of Offer from SEI.**
- **Once approved and a request for payment is made, confirmation of the above, including proof of purchase is a requirement for payment of the grant.**

Phase III Documentation

All documentation for applications and registrations has changed for Phase III of the Greener Homes Scheme. Old versions of documentation will not be accepted and will be returned to the applicant. Using the incorrect versions of documentation will lead to a delay in processing of applications, payment or registrations. Copies of all new documentation are enclosed with this newsletter for your convenience. Copies can be downloaded from www.sei.ie/greenerhomes or by calling 1850 734 734.

- GHS Application Form – **Ver 3**
- GHS Application Guide – **Ver 3**
- GHS Installer Registration Form – **Ver 3**
- Biomass Standard Commissioning Report – **Ver 5**
- Solar Standard Commissioning Report – **Ver 5**
- Heatpump Standard Commissioning Report – **Ver 5**

Commissioning Reports & Registration
The correct version of the commissioning report must be used for each phase of the Scheme. Version 4 must be used for all Phase I and Phase II and Version 5 must be used for all Phase III installations.

Change Requests / Change Technology

Homeowners who wish to change their technology must submit a new application and it will have to go through the approval process again subject to the grant levels and terms/conditions of the Phase under which they reapply. The homeowner will need to notify us in writing that they no longer wish to avail of their current grant.

If the homeowner wishes to change their product/aperture area which affects their grant amount approved, the homeowner must contact SEI in writing to secure approval before they go ahead with the work. Change Requests cannot be processed at the same time as requesting payment.

Wood Gasification Boiler – Buffer Storage

A buffer store (accumulator) will be installed in conjunction with the wood gasification boiler to ensure the efficient operation of the boiler. Buffer stores are important heat storage devices, especially for wood gasification boilers. These boilers can only be operated efficiently when combined with an accumulator since controlled operation at part load is more difficult. This is due to the nature of the fuel (generally wood logs). Once combustion take place, the fuel will continue to burn irrespective of whether the dwellings heat load is met. Consequently the buffer or accumulator cylinder in a domestic biomass heating installation is the primary heat storage/distribution device, which is heated by the boiler to a set temperature and can store the resulting high temperature water for long system standstill periods, until heating or hot water is required. The buffer or accumulator capacity should be calculated in accordance with your manufacturer's recommendations. A rough guideline for establishing the volume of the buffer is available from EN303-5 and from the REIA training manual and is in the region of 55 to 65 L/kW of the rated boiler size.

Heat Pump System Requirements

When installing a heat pump into an existing dwelling it is critical to ensure that the building is **sufficiently insulated** and the **existing heating system is surveyed** for compatibility. In many cases the dwelling's fabric will need to be upgraded to ensure efficient operation and thus optimal electricity cost. It is recommended to try and achieve insulation levels as close to "new build" requirements, where possible and practical. Recommended values for average elemental U-value for insulation would be:

- Roofs: *0.16 W/m²K*
- Walls: *0.27 W/m²K*
- Ground Floors: *0.25 W/m²K*
- Exposed Floors: *0.25 W/m²K*
- External doors windows/roof-lights: *2.0 W/m²K*

For more information in regard to achieving good insulation levels, please consult the relevant SEI publications, in particular the following: What is a U-value, the Detailed Guide to Insulating Your Home and Renovating and Older Home .