# Renewable Heat in Horticulture

## Welcome







# **Programme**

Time	Item	Who
9.30	Arrival and registration	
10:00	Welcome and introduction	Teagasc
10:15	SSRH and renewable options in horticulture	FEC Energy
10:45	Practical experiences	Ebtech Solutions
11:15	Biomass boilers	Woodco
11:45	Fuels and sustainability	FEC Energy
12:15	Notes for afternoon visit	Teagasc
12:45	Lunch and depart for visit by 13:20	
14:15	Nursery visit – Biomass in ornamentals	
15:15	Depart	

# SSRH – What do we know?!







#### What is the SSRH?

The Support Scheme for Renewable Heat is a government funded initiative designed to increase the energy generated from renewable sources in the heat sector. It will contribute to meeting Ireland's 2020 renewable energy targets whilst also reducing greenhouse gas emissions.

The government funded scheme will support the adoption of renewable heating systems by commercial, industrial, agricultural, district heating, public sector and other non-domestic heat users not covered by the emissions trading system.

The Scheme aims to

- Bridge the gap between the installation and operating costs of renewable heating systems and the conventional fossil fuel alternatives
- Incentivise the development and supply of renewable heat.

The Scheme will provide

- An installation grant
- On-going operational support











### Headlines

- Grant support up to 30% available now
  - Heat pumps
- Ongoing operational support (Tariff)
  - Biomass boiler
  - Biomass CHP
  - AD CHP
  - Biogas boiler







### Scheme rules

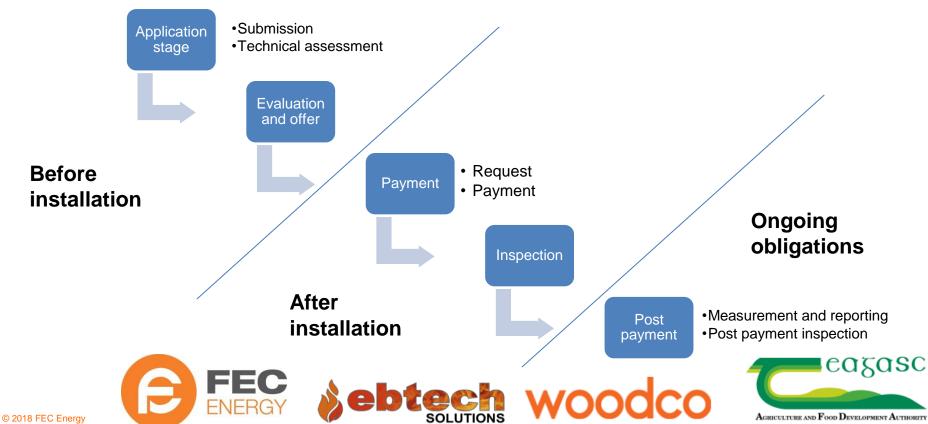
- Grant scheme rules published now
- Tariff rules to be published....
  - Before tariff is effective
  - Late 2018 early 2019







## **Grant Scheme process**



#### **Technical rules**

- SCoP of 2.5 to EN 14825 (2016)
- Be new
- Appropriate metering
- CE marking
- Liquid heat transfer
- <45kWth MIS3005...>45kWth CIBSE Guide B BISRIA Guide BG 7/2009
- Legionella proof







#### Measurements

- Electricity used by the heat pump
- Heat input into the heat pump
- Eligible heat used in the heating system
- Other sources of heat







#### What about Biomass?

#### Ongoing Operational Support / The Tariff

#### Opens late 2018 / early 2019 subject to State aid approval

The Scheme will also offer ongoing operational support (a tariff) based on useable heat output in renewable heating systems in new installations or installations that currently use a fossil fuel heating system and convert to using the following technologies:

- o Biomass boiler or biomass HE CHP heating systems; and
- o Biogas (anaerobic digestion) boiler or biogas HE CHP heating systems.

The Tariff will be made available to successful applicants for a period of up to 15 years.









## **Proposed tariffs (2016)**

The proposed tariffs for the Scheme are:

Tier	Lower Limit (MWh/yr)	Upper Limit (MWh/yr)	Biomass Heating Systems Tariff (c/kWh)	Anaerobic Digestion Heating Systems (c/kWh)
1	0	300	5.66	2.95
2	300	1,000	3.02	2.95
3	1,000	2,400	0.50	0.50
4	2,400	10,000	0.50	0.00
5	10,000	50,000	0.37	0.00
6	50,000	N/A	0.00	0.00









## **Potential Eligibility Criteria**

- ✓ Providing heat for eligible purposes
- ✓ Has to be new (Commissioned after July 2009)
- ✓ Solely Biomass
- ✓ Emissions
- ✓ Installation & Metering is correct
- ✓ No grants or public funding
- ✓ Biomass Sustainability







## Applying for the SSRH

- Can be made online
- Documentation needed
  - Schematic
  - Independent metering report
  - Boiler warranty and commissioning
  - Proof of eligible use
  - Calibration certificates
  - Emissions Certificate
  - Bank account details
  - Photographs
  - Meter readings













## Ofgem Audits – UK experience

Ofgem carry out two types of audit

- Desk based
- Site Audit

They publish results of audits, main non-compliances are:

"If you think compliance is expensive – try non-compliance."

Former U.S. Deputy Attorney General Paul McNulty

- "• participants have not been maintaining fuel records for biomass installations, particularly where harvesting their own fuel. We would like to remind participants that records of the quantity and type of fuel used and the date of supply to the boiler must be maintained.
- meters have not been installed in accordance with manufacturer's instructions. Metering equipment and meter installation manuals must be checked to ensure the meter has been installed correctly."





