

Selling your Renewable Electricity

Renewables East Feed In Tariff Event

1 March 2010

Leaders in the design, implementation and operation of
markets for electricity, gas and water.



Selling Your Electricity

- What you need first:
 - Planning consent – later presentation
 - Grid connection
 - Metering
 - Accreditation
- Contracting to sell your electricity
- Overview of other ways to sell electricity
- How heat may be different



Grid Connection

- You will need to conform to electrical standards
 - Inverter to make electricity suitable for grid use
 - Meet technical and safety requirements
 - Installer should deal with this
- Normally need permission of the distribution company (EDF Energy Networks) before connecting a generator to the distribution system
- If your generator is below 16 Amps per phase you do not need the distribution company's permission to connect
 - 2kW outputs 2000 watts / 230volts = 9 Amps on single phase
 - 6kW outputs 6000 watts / 230volts = 26 Amps on single phase
 - 6kW outputs 6000 watts / 230volts = 9 Amps per phase on three phase
- Installers can advise...



Grid Connection

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- EDF Energy requires notification before or on the same day if you connect a generator below 16 Amps per phase,
- Various electrical standards for connection
 - Installer should be familiar with these!
- Notification form on the EDF website:
 - <http://www.edfenergy.com/products-services/networks/knowledge-centre/public-information.shtml>
 - Under “Information for Installers of Generation”
- For multiple small units EDF require an application in advance
 - e.g. part of a larger development scheme

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- EDF Energy must give its consent ahead of connection and may charge for grid connection if generation is
 - Over 16 Amps per phase at low voltage (230 volts), or
 - Connected at higher voltages
- Contact EDF Energy on
 - connections.projectsgateway@edfenergy.com
 - 0845 234 0040

Metering

- Each installation requires
 - A total generation meter
 - *Installer* of your generator should install
 - Installed at the inverter to measure the total amount of electricity generated
 - An export meter
 - Electricity *supplier* should install, unless you need a HH meter
 - “Deeming” may be allowed in some cases before smart meters are rolled out

Ofgem-approved electricity generation meters:
<http://www.ofgem.gov.uk/Networks/Techn/Metrology/Documents/1/Latest%20schedule%204%20list.pdf>



Accreditation

- Accreditation through either the Microgeneration Certification Scheme (MCS) or Ofgem

- Technologies with MCS processes
 - (Wind, solar PV, hydro <50kW, microCHP)
 - 1. MCS recognition required first (accredited equipment)
 - 2. Approach a FIT supplier, they will register the site

- Other technologies
 1. First get accreditation from Ofgem (similar process as RO?)
 2. Then approach a FIT supplier

Ofgem

- Ofgem administers renewable schemes on behalf of the Government
 - ROCs
 - CCL
 - Regulation authorising Ofgem to administer the FIT is currently going through Parliament
- Have a dedicated renewables team
- No published guidance yet on FIT
 - Central FIT register will be administered by Ofgem
 - Site, technology and ownership details



Selling your electricity

- Need to contract with an energy supplier
 - Can use your current supplier
- Suppliers with over 50,000 domestic customers are *obliged* to participate
 - British Gas, EDF, RWE npower, Powergen (E.ON), SSE, Scottish Power
 - Obligated to offer FITs to generators on sites they supply
 - Obligated to offer FITs to any generators on sites not served by a mandatory FITs supplier, including off-grid
 - Smaller suppliers may also offer contracts
 - Try: Good Energy, Ecotricity, Green Energy (renewable suppliers)
 - Shop around: some may offer better deals??



Non-FIT contracting

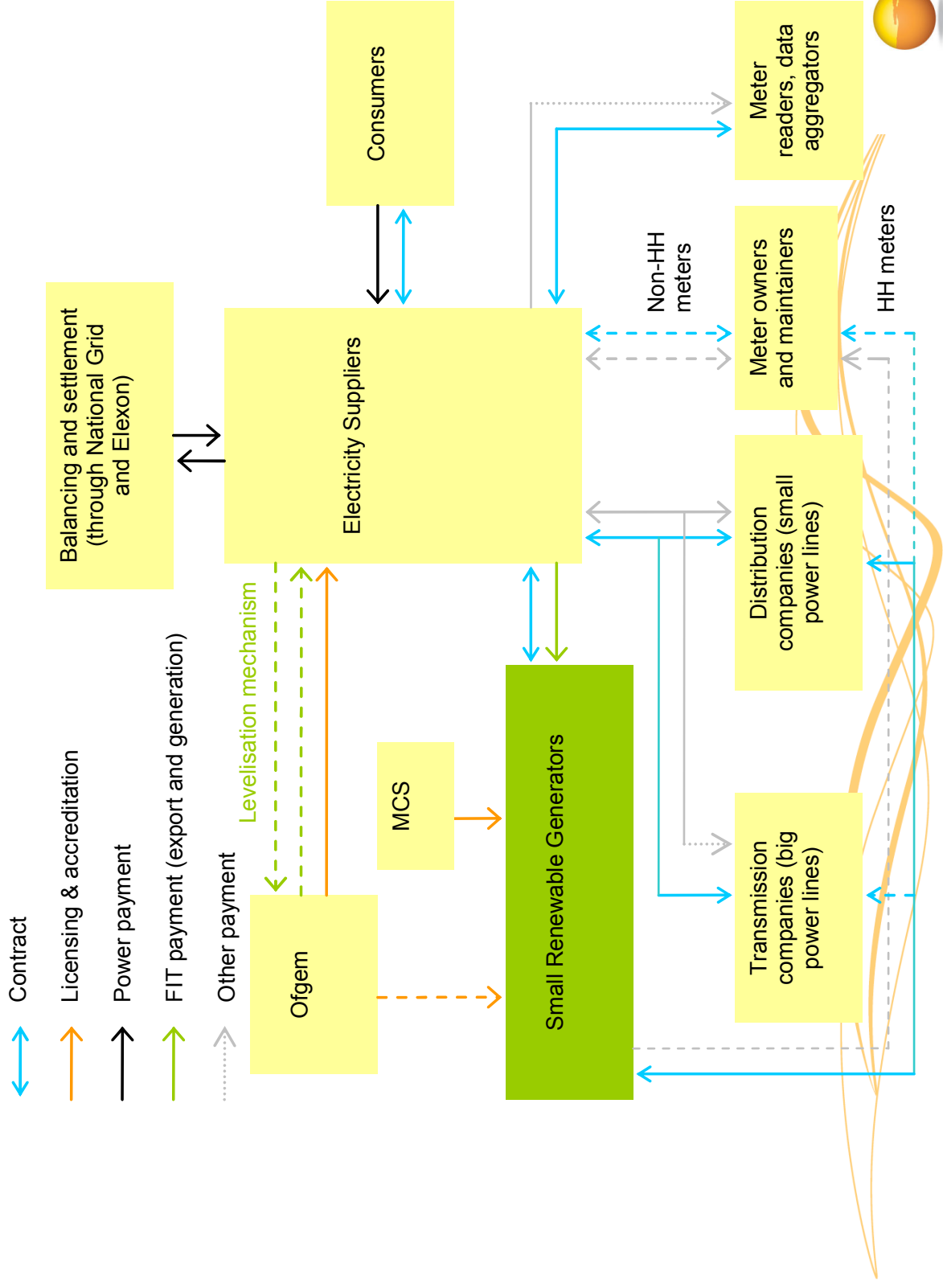
- In addition to FIT, generators can receive:
 - Climate Change Levy exemption certificates (LECs)
 - Renewable Energy Guarantees of Origin (REGOs)
- Registration using Ofgem website
 - www.renewablesandchp.ofgem.gov.uk
 - Apply for accreditation and receive certificates for LECs, REGOs and ROCs online

- If not contracting using

FITs

- Renewable Obligation Certificates (ROCs) – depending on size of installation
- Power purchase agreements (PPA) need to be separately arranged with electricity suppliers
 - May bundle Energy/ ROCs/ LECs etc. in single package

Contracting under FIT



Renewable Heat Incentive (RHI)

- Government aiming to have the RHI in place by April 2011
 - Currently going through DECC consultation process
 - Closes on 26th April 2010
 - Financial support mechanism for renewable heat
 - Air and ground source heat pumps, solar thermal, biomass boilers, renewable CHP, biomass, bioliquids, biogas.
 - At all scales
 - Only for installations after 15 July 2009

Details available at:

<http://www.decc.gov.uk/en/content/cms/consultations/rhi/rhi.aspx>

Renewable Heat Incentive (RHI)

- Some details in consultation
 - Fixed tariff by technology
 - Grandfathering
 - Deeming for all scales apart from large industrial – to encourage efficiency
 - Tariffs designed to:
 - Compensate for costs and some non-financial barriers
 - Investment return –12%, other than 6% for solar thermal
 - Ofgem to pay tariffs, audit and enforce
 - MCS accreditation
 - Funding to be decided
 - Levy on fossil fuel suppliers (gas etc.)?



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