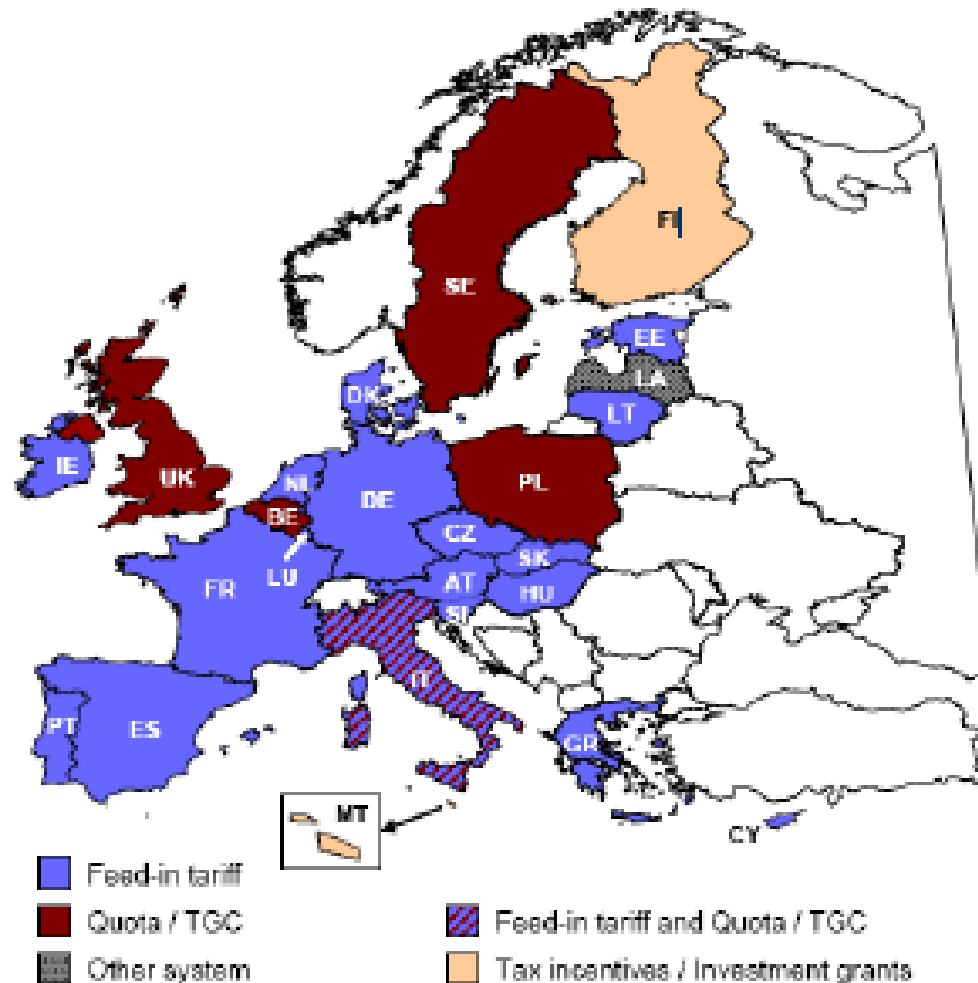


A decorative graphic in the background of the slide, centered behind the text. It consists of multiple horizontal bars of varying lengths and shades of blue, arranged in a way that creates a sense of depth and movement, resembling a stylized sunburst or a series of overlapping planes.

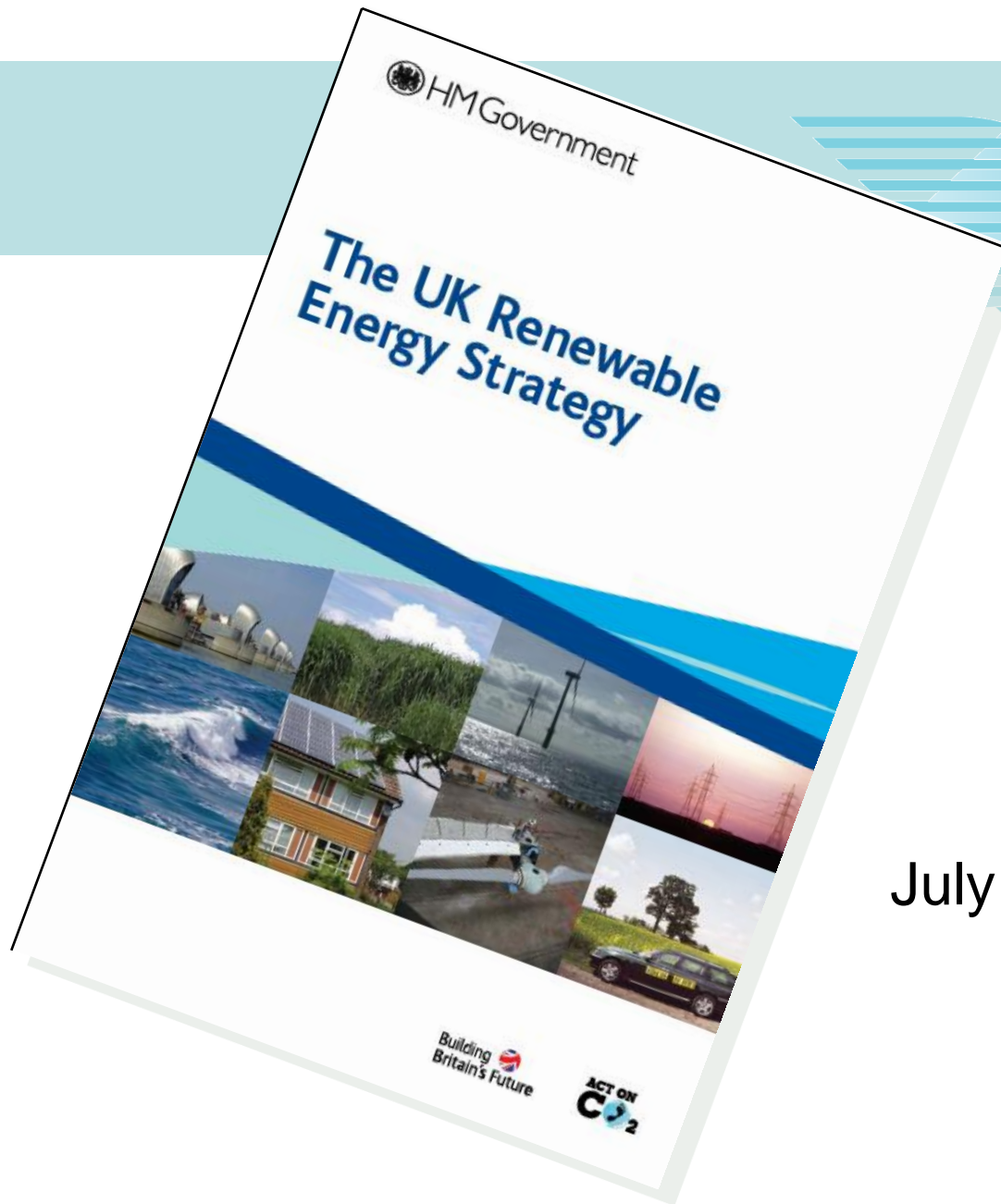
UK: Renewables and Financial Incentives

Stuart Senior, ELEXON Limited

Schemes to support EU renewables generation



Source: Evaluation of different feed-in tariff design options - Best practice paper for the International Feed-in Cooperation. Energy Economics Group.



July 2009

Agenda



- » Targets
- » The Renewables Obligation (2002 – 2037+)
- » Feed-in Tariffs (from 2010)

Renewable Energy and Electricity Targets



- » 2009 EU Renewable Energy Directive commits UK to a **15%** target by **2020**
- » The Government's lead scenario calls for **>30%** of electricity to generated from renewables (c.f. ~6% today)

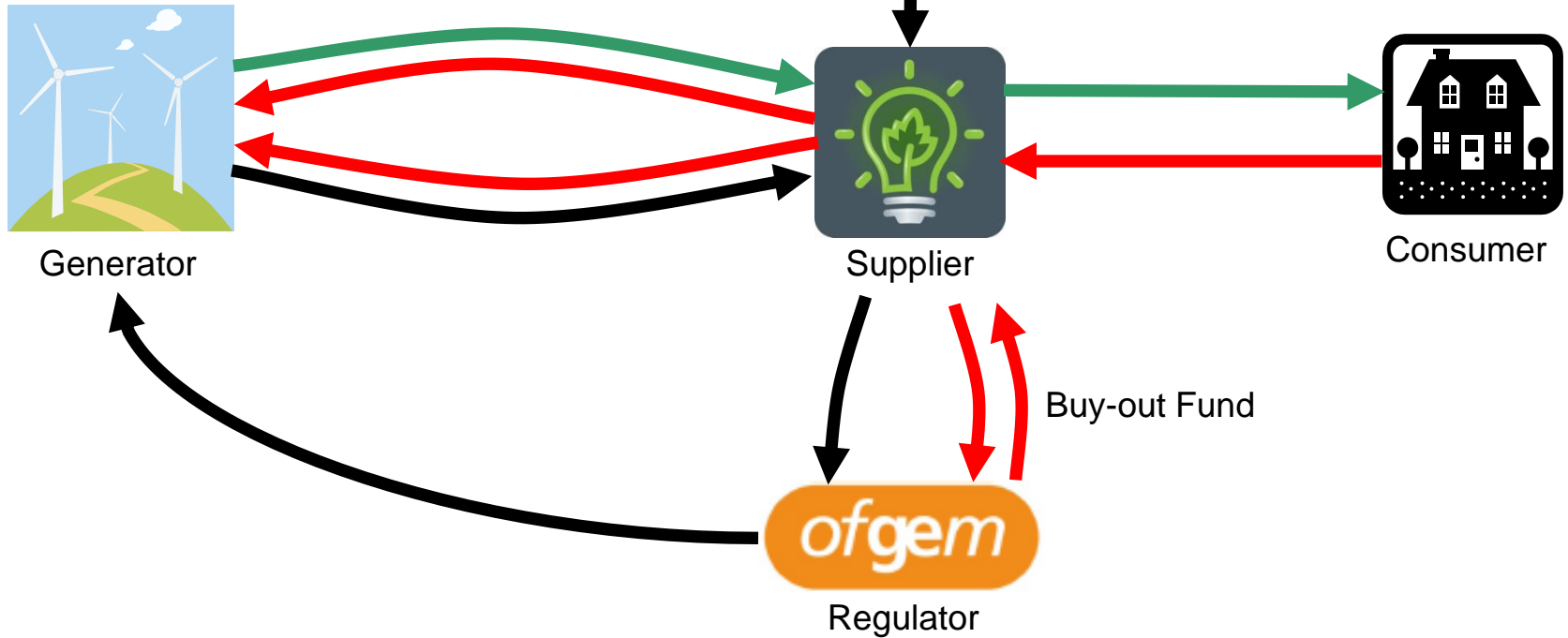
The Renewables Obligation



- » The main financial instrument to incentivise the generation of low-carbon renewable electricity
- » Introduced in 2002 and revised 2004,5,6,7 & 9
- » Suppliers are obliged to source an increasing proportion of their demand from renewable sources

How it works ...

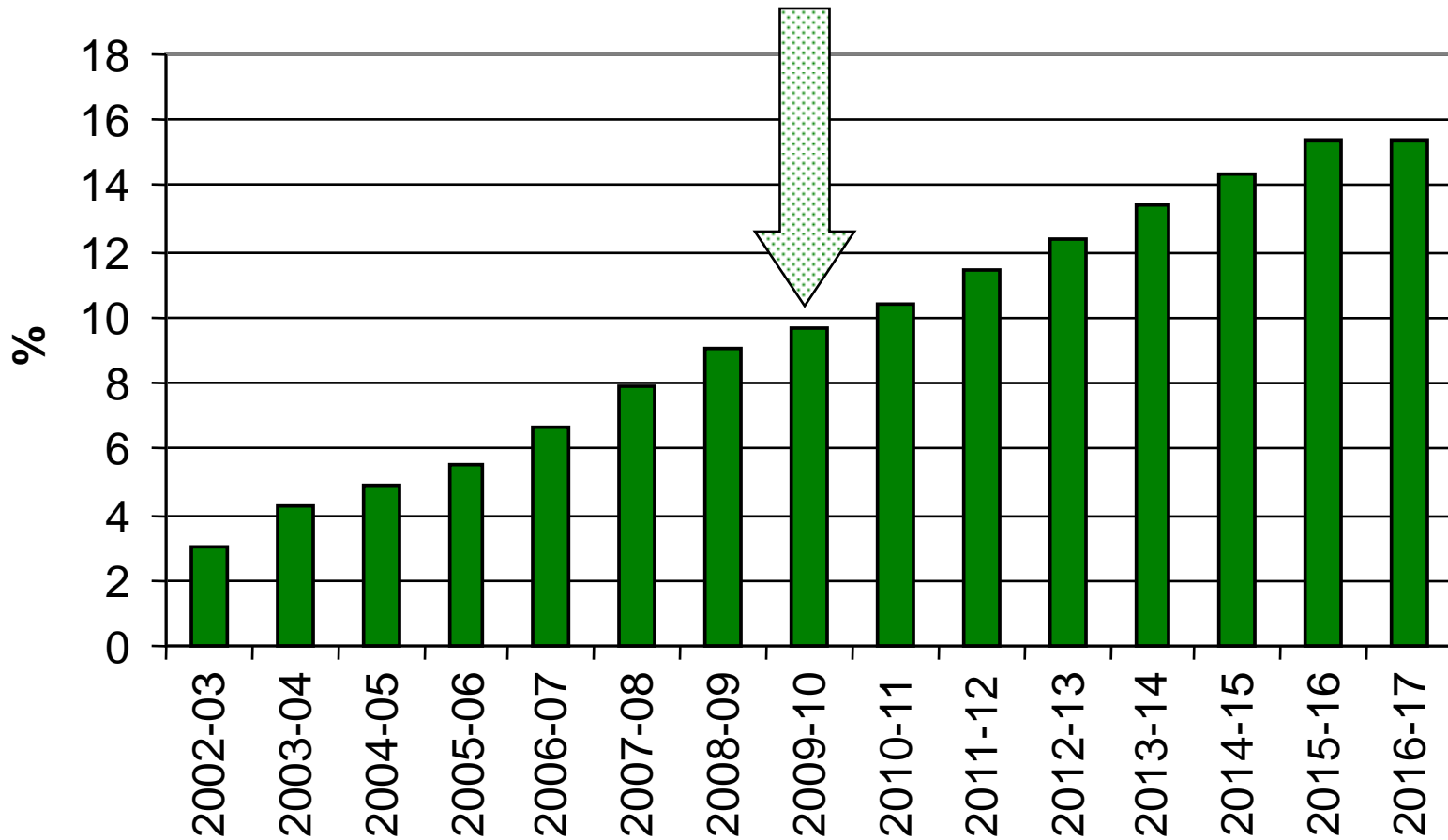
-  **Certificates**
-  **Sale of electricity**
-  **Money £**



Obligation %



9.7%



ROC Banding (as of 2009)



<i>Band</i>	<i>Technologies</i>	<i>ROCs/MWh</i>
Established 1	Landfill gas	0.25
Established 2	Sewage gas, co-firing of biomass	0.5
Reference	Onshore wind, hydro, co-firing of energy crops	1
Post-demo	Offshore wind, dedicated biomass	1.5
Emerging	Wave, tidal, PV, geothermal	2

Accredited capacity – August 2009



» 5.7 GW

- 3.1 GW onshore wind
- 0.9 GW landfill gas
- 0.7 GW hydro
- 0.3 GW biomass
- 0.6 GW offshore

Why Feed-in Tariffs?



- » Renewable Obligations designed to encourage investment from “professional” energy companies in large scale renewable schemes
- » European Commission’s view that Feed-in Tariffs more efficient than quota systems.



- » Energy Act 2008 gave powers to introduce:
 - a Feed-in Tariff scheme (April 2010)
 - a Renewable Heat Incentive scheme (April 2011)

Feed-in Tariffs (FiTs)



Objective:

- » Encourage communities, businesses and domestic customers to invest in small-scale renewable generation up to **5MW**

Benefits:

- » Contributes to the renewable targets
- » Increases security of supply
- » Reduces losses



Consultation closes
15 October 2009

http://www.decc.gov.uk/en/content/cms/consultations/elec_financial/elec_financial.aspx

FiTs – How they might work (1)



- » Three main financial incentive mechanisms:
 - Fixed tariff payment for every kWh generated
 - Fixed tariff payment for every kWh exported
 - Offset “on-site” use against import
- » FiT Payments made by Suppliers
- » Tariffs set by DECC
- » Tariff paid for 20 years
- » Technology and capacity based tariff
- » Phased over time
- » “Levelisation” across all suppliers

FiTs – How they might work (2)



- » Tariff only being offered to proven technologies:
 - Wind
 - Solar PV
 - Hydro
 - Anaerobic digestion
 - Biomass

FiTs – what next?



Consultation closes on Thursday

Go-live in April 2010