

ofgem Promoting choice and value for all gas and electricity customers

Lifting the Lid on Feed-in **Tariffs**

Ofgem Microgeneration Forum 26 June 2008



Aim of session

A fact finding session

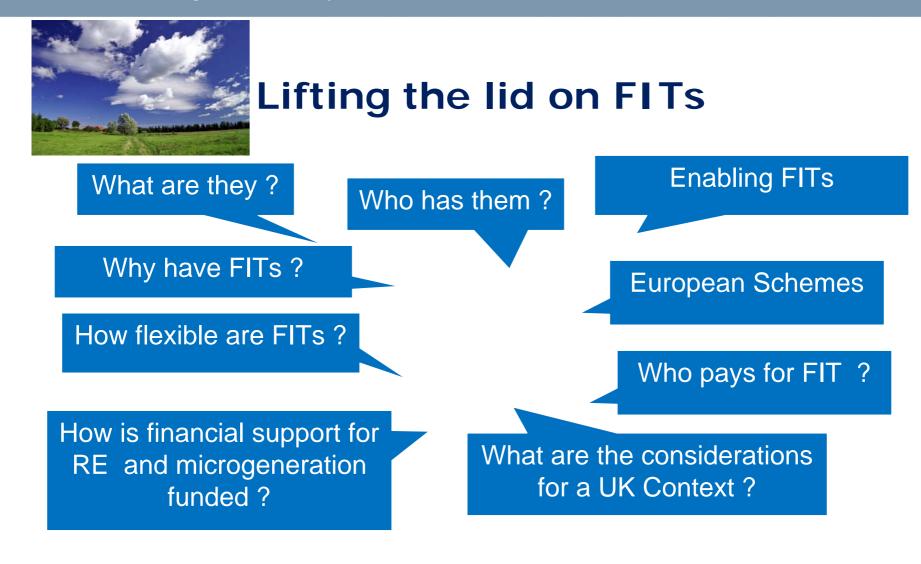
Promote Informed discussion

Highlight areas for UK to consider



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What are FITs? Many forms but generally put a Provides tariffs for a range of levels from legal obligation on transmission or distribution domestic to large scale networks to buy electricity from developments renewable energy producers at a premium rate The tariff generally decreases over time e.g. by 5% after 10 years and by 10 % after 15 years The tariff and term are The **cost** is shared in set at **specific levels** various ways between above the market rate for all energy users each technology



Who has Feed-in Tariffs ?

In 2007 FITs were in place in 46 jurisdictions around the world, including Canada, Australia, the US and most of the countries in Europe

Portugal introduced the first FIT in 1988, updated in 2001

Germany and Spain's FITs are considered good models because of their success in mass deployment of renewables particularly microgeneration and the low cost to customers

Ireland introduced a FIT in 2005 replacing a quota system



Why have FITs ?

To address financial barriers to renewable energy and encourage long term investment in the renewable market

To create a level playing field for all sizes of renewable and all types of technologies particularly in the absence of carbon pricing

To introduce a direct policy instrument to contribute to renewable energy targets



Enabling FITs

In the absence of effective carbon pricing, financial support such as FITs are a necessary but not sufficient condition to bring forward renewable energy or microgeneration.

In Europe **FITS and** other <u>financial support</u> have been introduced alongside other renewable energy policies to address <u>non financial</u> barriers.





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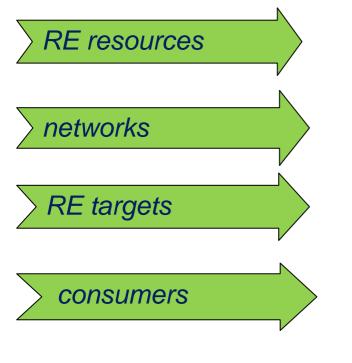
European FIT Schemes

	GERMANY	SPAIN	SLOVENIA
Purchaser	Network Operators	Network Operators	Network Operators
Banded tariffs based on tech & size	Yes	Yes	Yes
Does the tariff decrease over time ?	Yes	Yes	Yes
Are tariffs set ex ante or ex post?	Ex-ante tariff fixed for 20 years	Ex-ante tariff or chose mkt + premium	Ex-ante tariff set annually or chose mkt + premium
What RE target is in place?	20% by 2020	12% by 2010. New target will be set in 2008	33.6% by 2010
Other features of system	Tariffs are a hybrid based on the yield and generation costs of specific plant	Penalties applied if deviation of RE generation from forecast above a certain threshold	Variable tariff option if can adapt production relative to demand load



How Flexible are FITs ?

FITs can be shaped according to a country's:



Stepped tariffs based on the yield/generation costs of specific site so that tariff mirrors the cost resource of the technology

In Germany there are a large number of network operators but there is a mechanism used to ensure that the costs are spread evenly across all networks

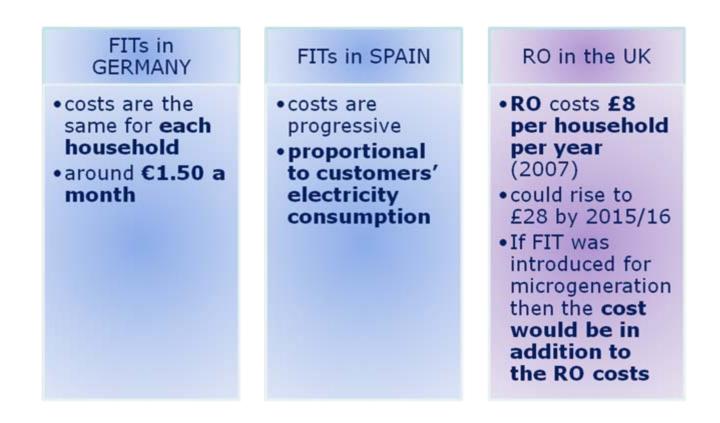
e.g. some FITs cover specific developing technologies in order to meet targets that have been set

In countries where there are a large number of fuel poor customers adaptations can be made to the way the cost of FIT is recovered e.g. in Germany the costs is the same per household whereas in Spain it is connected to the amount energy a customer uses

There are many design options which take account of these variables including some which make the system more compatible with liberalised energy markets



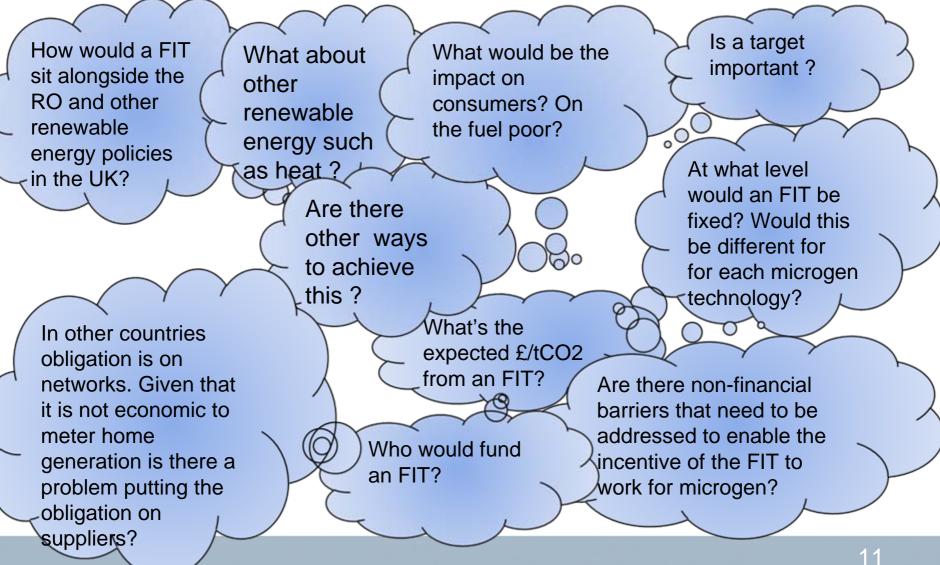
How is financial support for RE or microgeneration funded?





for all gas and electricity customers

Some considerations for the UK context





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