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[RHI lessons from GB v2.pdf](#)

Found the attached in passing – may be of interest for anything we do for Ireland RHI scheme. Was presented at Renewable Heat Incentive conference and Exhibition at the Ramada Plaza, Shaw's Bridge on 20 June 2013 at event hosted by Action Renewables [I also spoke].

[Internal Only]

RHI – lessons from the GB experience

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Overview of talk

- About the REA
- Why we wanted heat tariffs
- How we wanted it done
- How it was done
- Update so far
- Lessons to learn for
 - DETI
 - Project developers
 - Representative bodies
 - The administrator
- Conclusions

REA

We are unique, in that:

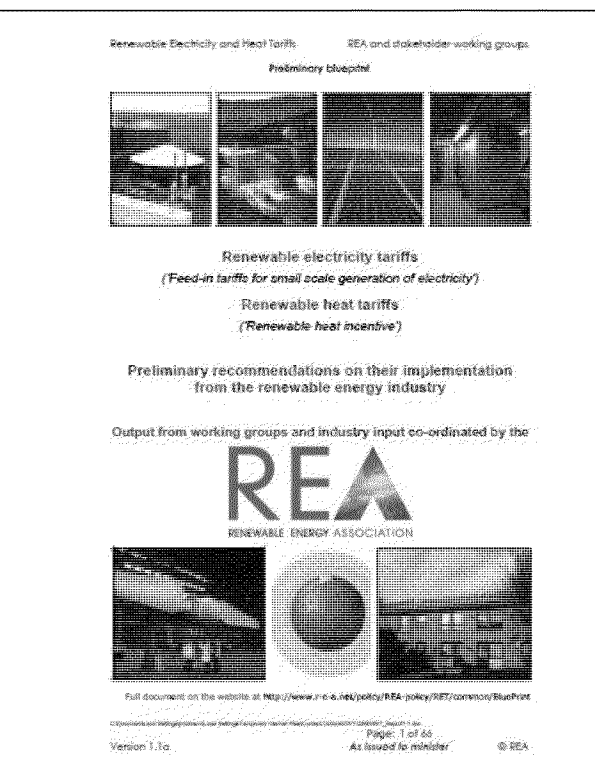
- over 1000 members and rising
- Members of all sizes – from sole traders to multinationals, with one member one vote
- REA covers all sectors and all renewable technologies:-
 - Heat
 - Power generation
 - Transport fuels
 - Biomethane to grid
- Activities include lobbying and policy development, networking, training, information dissemination to members, stakeholders and the wider community

About us

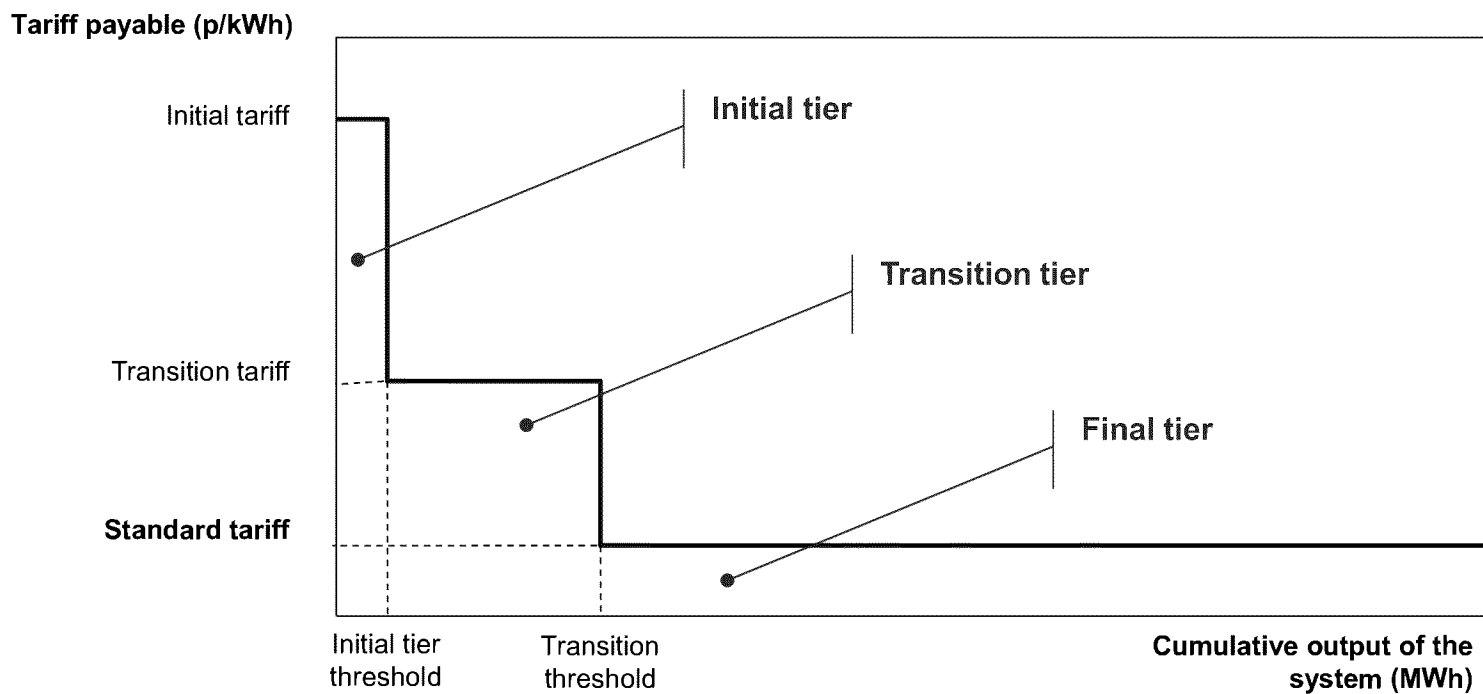
- Energy efficiency first – minimise gap first then fill with most sustainable
- No preference expressed on nuclear, gas, CCS
- Meet RE targets in the most cost-effective manner
- (some provisos)
- Market not determine technology mix within Renewables
- Financial incentives should not skew technology choice, project sizing or operational characteristics
- Stability of financial incentives (even if not perfect, there comes a point when you work with what you've got)
- No retrospective policy changes. Ever.
- Cost-reflective use of network charging
- Simplicity in the policy landscape, no overlap of policy measures

Why we wanted heat tariffs

- Renewables targets require 12x increase in renewable heat by 2020
- Heat just under half of UK energy use and GHG emissions



How we wanted it done - Terraced tariffs



Why we wanted tiered tariffs

- Limits perverse incentive to
 - size projects to fall just beneath a threshold (or in the case of electricity generation equipment, to de-rate it).
 - divide a single installation into several smaller entities.
- Fewer classifications needed – one per technology
- It delivers a bit of ‘front-loading’
- The overall cost is lower because the smooth transition with size is more efficient than quantum steps (18.6%)

but

- The concept is a little more difficult to understand
- A record of the cumulative output would need to be kept

What we got

Technology	Scale (kWth)	Tariff (p/kWh)	
Biomethane injection	All scales	7.3	
Biogas combustion	Sub 200	7.3	
Biomass boilers	Sub 200	Tier 1	8.6
		Tier 2	2.2
	200-999	Tier 1	5.3
		Tier 2	2.2
	1000 +		1.0
Ground source heat pumps	Sub 100	4.8	
	100 +	3.5	
Solar thermal	Sub 200	9.2	

Tiered tariffs for biomass

Technology	Scale (kWth)	Tariff (p/kWh)
Biomethane injection	All scales	7.3
Biogas combustion	Sub 200	7.3
Biomass boilers	Sub 200	Tier 1 8.6
		Tier 2 2.2
	200-999	Tier 1 5.3
		Tier 2 2.2
Ground pump		1.0
	Tiered tariffs, higher rate for first 1314 hours of year (assumed 15% at full load factor), thereafter lower rate applies.	
Solar thermal		9.2

At the moment, from 1st July reduced by 5%

Comparison with NI

Technology	Scale (kWth)	Tariff (p/kWh)
Biomethane injection	All scales	7.3 (3.1 NI)
Biogas combustion	Sub 200	7.3 (3.1 NI)
Biomass boilers NI = 6.4p / 6.1 / 1.5 different size thresholds (smaller)	Sub 200	Tier 1 8.6
		Tier 2 2.2
	200-999	Tier 1 5.3
		Tier 2 2.2
1000 +	1.0 (NI = Not eligible)	
Ground source heat pumps	Sub 100	4.8 (8.7 - 4.4 NI)
	100 +	3.5 (1.3 NI)
Solar thermal	Sub 200	9.2 (8.8 NI)

Key differences between NI RHI and rest of UK

- Started later, so you have not had consultation on cost control yet, let alone the phase 2 technologies...
- A smaller budget
- The tariffs lower, as comparing costs with oil (rather than gas)
- Single tier tariff for biomass, which stops at 999kW
- You will find information in a different place

Results so far

As at Tuesday 18 June:

- Just under 350 MWth accredited
- 99% of which is biomass boilers, compared with DECC modelled share of 58% (more on this later)
- Just under £13.5m paid out – 2013/14 budget is £251m
- Degression trigger already hit for medium biomass
- Repeated delays for phase 2 technologies and the introduction of the domestic tariff

REA summary of Future changes for biomass, as set out to us

Issue	Decision	Implementation
Air quality limits	Feb 2013	Sept 2013?
Sustainability	Feb 2013	2014? 2015?
Metering changes	Feb 2013	Sept 2013?
Increased tariff for large biomass	Autumn 2013	Spring 2014
New tariffs for biomass CHP, direct air?, domestic	Summer 2013	Spring 2014
Energy efficiency	Summer 2013	?
Cost control mechanism	Feb 2013	July 2013 onwards
Allow relocation of installations	Feb 2013	End 2013
Process heat doesn't have to be in a building	Feb 2013	End 2013

Concerns over budget and cost control

- Short time horizon compared to FITs and RO, as funded from general taxation (March 2015 vs March 2020)
- ‘Spending Round’ to be published June 26. This will set out spending for **2015-16 only**
- Projects with longer lead times suffer
- Tariffs reduced if ‘too much’ deployment
- Degression occurs if technology capacity triggers hit **and** overall spend projected to be over 50%
- Trigger just been pulled on medium biomass - 5% reduction from 1 July – with further reductions likely

Scheme administration issues

- Problems with compliance:
 - schematics not matching those described in the application
 - Audit non-compliances – including relatively minor ones such as failure to keep records of biomass fuels
 - High level of errors in data submissions from meter readings – and not just first time round
- Ofgem had to do some ‘learning on the job’ resulting in confusion and frustration on some issues:
 - Capacity of biogas installations
 - Eligibility of care homes
- Some welcome pragmatism on other points where regulations are poorly drafted
- Ofgem has set up industry liaison group, which we have found useful

Lessons for DETI

- Publicise the scheme
- Be technology-neutral in your approach to cost control - Don't follow GB down technology-specific capacity-triggered degression road - it's a small budget and if you sub divide it, you're bound to get it wrong
- Give the administrator clear guidance
- Don't let there be perverse incentives

Lessons for developers

- Do your homework
- Try not to respond to perverse incentives
- Make sure your client/s understand/s how to fill in the forms
- When lobbying, be aware of the big picture, don't focus only on the tariff band relevant to your projects

Lessons for representative bodies / lobbying

- Not all members can have what they want
- Don't allow Government to divide the funding
- If there are perversities, warn the Government

- Give some thought to training independent metering report providers

Lessons for administrators

- Get clear guidance from DETI
- Automate the website where you can
- Have a liaison group with industry
- Where regulations not clear, be proactive (.... the care home example)

Conclusions

- Remember this policy has broken new ground
- We wont forget our words “***roughly right*** and introduced at the earliest opportunity”
- It was unfortunate to be launched at time of economic challenge
- Still half way through introduction in GB
- NI has the opportunity to learn
- It is more important / head basis

Thank you!

Gaynor Hartnell

Renewable Energy Association

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