

# Financial elements to facilitate the development of SRF

## ERFO / RRF Conference on Solid Recovered Fuels

November 2008

## SRF / MSW Disposal Routes

- Industrial intensive energy users with / without CHP
- Public sector energy users with / without CHP
- Captive SRF burners (EfW) with / without CHP
- Cement kilns
- Co-firing with coal or biomass with / without CHP
- Landfill

## Heat Users – who are they?

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- Industrial energy users
  - High quality steam
  - Low quality heat
- Public sector installations
  - MoD
  - Hospitals, prisons and other public buildings
  - Airports
- Other biomass applications – non-CHP
- Counterparty strength

## How can SRF help secure CHP?

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- Industrial energy user or public sector entity converts existing fossil fuel fired CHP to solid fuel firing either in whole or in part
  - Conversion of an existing CHP plant or expansion of an existing installation
  - Construction of a new CHP plant
  - Flexibility of fuel supply
  - [SRF to a cement kiln. This may not produce CHP but it could provide useful fossil fuel substitution benefits]

## What are the financial elements?

- Enhanced capital allowances  
[https://www.chpga.com/guidance\\_notes/GUIDANCE\\_NOTE\\_42.pdf](https://www.chpga.com/guidance_notes/GUIDANCE_NOTE_42.pdf)
- Neutrality for SRF – see RO Stat Con Section 3
- EfW with CHP within the RO – see Section 3  
<http://www.berr.gov.uk/files/file46838.pdf>
- Good quality CHP – boundary conditions  
[https://www.chpga.com/guidance\\_notes/GUIDANCE\\_NOTE\\_44.pdf](https://www.chpga.com/guidance_notes/GUIDANCE_NOTE_44.pdf)

## Good quality CHP – boundary conditions

- DECC put out a consultation on the draft RO order recently to which there were many replies, including some concerned about GQCHP indices for EfW CHP. We are currently reviewing the responses and will consider them when the RO Order is laid, together with the accompanying guidance.

## Financing considerations

- Integrated or disaggregated?
- Credit term / counterparty status
- Corporate or project finance?
- Disposal gate fee / unitary charge

## Finding heat users

- WIDP Round 4 heat / SRF studies
- Local Authority Round 4 heat / SRF studies
- FEY study for Yorkshire region
- WIDP Information Note on CHP / SRF
  
- Heat Map
- National Allocation Plan (NAP)
- A review of PCC permits. Identifies installations with high CO<sub>2</sub> emissions

### Paragraph 5.3.44

Generating energy from that portion of waste that cannot be prevented, reused or recycled has both energy and waste policy benefits. Energy generated either directly from waste or through the use of a refuse derived fuel has benefits for security of supply. In addition, the biodegradable fraction of waste is a renewable resource. The RO will remain open to the biomass fraction of waste used in good quality CHP stations....

## There are five pieces to the jigsaw

- Energy sector – outputs and fuels
- Waste market
- PFI / PPP investment and methodology
- Technology offering
- Carbon footprint / WRATE

## Key players – who are they?

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- Fuel producers / Fuel users
- Fuel aggregators
- Equipment suppliers
- Civils contractors
- Waste management contractors
- Energy service companies
- PFI equity / PFI conversancy
- Financial institutions
- Advisers – technical, legal, financial

## PFI projects - approved

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Plant	Reference Technology	Status	MSW Capacity	On-line
Cambridgeshire County Council	MBT/LF	Procurement	240,000	2009
Lancashire	MBT/LF	Construction	657,000	2009
Newhaven	EFW	Planning Permission	210,000	2011
Devon County Council	EFW	Planning Permission	70,000	2011
Southwark LB	MBT/RDF	Planning Application	100,000	2012
Cornwall County Council	EFW/CHP	Planning Application	240,000	2012
Nottinghamshire County Council	EFW	Planning Application	180,000	2012
Greater Manchester WDA	MBT/AD/RDF/CHP	Procurement	500,000	2012
Cheshire County Council	MBT/RDF	Procurement	300,000	2012
Wakefield City MDC MBC	MBT/LF	Procurement	100,000	2013
Shropshire County Council	EFW	Planning Application	90,000	2013
Surrey County Council	EFW	Planning Application	270,000	2013
Merseyside WDA	MBT/RDF	Procurement	400,000	2014
N Yorkshire & York	MBT/EFW	Procurement	250,000	2014
Oxfordshire County Council	EFW/CHP	Procurement	250,000	2014
West Sussex County Council	MBT/EFW	Procurement	200,000	2014

## PFI projects - in pipeline

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Plant	Reference Technology	Status	MSW Capacity	On-line
Plymouth City Council	EfW/CHP	Eol	200,000	2014
Staffordshire County Council	EfW	Eol	300,000	2014
Barnsley, Doncaster and Rotherham	EfW	OBC	250,000	2014
Bradford City MDC MBC	MBT/EfW	OBC	240,000	2014
Suffolk County Council	EfW	OBC	200,000	2014
Essex County Council	MBT/EfW	Eol	400,000	2014
Norfolk County Council 2	MBT/LF	Eol	200,000	2014
Leicestershire County Council	EfW	Eol	200,000	2015
Lincolnshire County Council	EfW	Eol	150,000	2015
Leeds City Council MBC	EfW	OBC	200,000	2015
Gloucestershire County Council	MBT/EfW	Eol	130,000	2015
Milton Keynes / Northamptonshire	EfW	Eol	250,000	2015
South Tyne & Wear	MBT/SRF/CHP	OBC	260,000	2015

## Conclusions

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- Broaden definition of CHP outcomes
- Increase understanding of SRF / CHP linkage
- Early release of regional heat use information
- Contribution to scale from waste / non-waste biomass
- Enable bidders to “bring” CHP via consortia
- Planning: fuel producer / fuel user model de-links combustion from fuel production and preparation