



# UK Carbon Capture and Storage Demonstration Competition

UKCCS - KT - S5.1 - E2E - 001

Post-FEED Cost Schedule

April 2011  
ScottishPower CCS Consortium



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ScottishPower CCS Consortium

ScottishPower Generation Limited  
Longannet Power Station  
Kincardine on Forth  
Clackmannanshire  
Scotland

## IMPORTANT NOTICE

**Information provided further to UK Government's Carbon Capture and Storage ("CCS") competition to develop a full-scale CCS facility (the "Competition")**

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## CAPEX

units: 1,000,000 s

### *Spend profile:*

Core Capex £m: 2010

2011	-	-	-	-	-	4.3	2.2	4.3	2.6	-	-	-	-	-	-	-	-	13.4
2012	46.8	76.6	15.9	25.9	44.0	22.2	11.5	26.1	5.7	20.9	4.5	-	28.3	-	-	-	-	328.3
2013	60.6	73.9	15.3	67.5	44.0	40.5	27.5	41.0	4.6	3.3	13.4	1.4	56.6	2.8	10.3	9.8	-	472.5
2014	23.4	79.4	16.4	48.9	44.0	19.8	17.7	44.2	2.9	3.3	-	4.3	28.3	8.3	31.0	9.4	-	381.3
2015	6.9	43.8	9.1	1.4	44.0	1.9	23.7	10.6	-	-	-	-	-	-	-	-	-	141.4
2016	-	-	-	-	-	0.8	0.7	1.9	-	-	-	-	-	-	-	-	-	3.4
2017	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	137.7	273.7	56.7	143.7	176.0	89.5	83.2	128.1	15.7	27.6	17.8	5.7	113.3	11.1	41.4	19.2		1,340.3

### **Currency split:**

Core Capex £m: GBP 68.1

EUR	27.5	26.1	15.6	-	-	-	-	-	3.9	-	-	-	-	-	-	-	73.2
USD	-	-	-	-	-	-	-	-	-	-	-	-	36.2	-	17.8	-	54.0
NOK	-	18.4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	18.4
SEK	41.3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	41.3
(other)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	137.7	273.7	56.7	143.7	176.0	89.5	83.2	128.1	15.7	27.6	17.8	5.7	113.3	11.1	41.4	19.2	1,340.3

**OPEX**

 = manual entry  
 = per ISOS costs

**units:** as specified

Capture (£m)	Segment:	Steam & Power Supply		Carbon Capture Process		Compression & Drying		Balance of Plant		Site - Other		Owners Engineer / Proj Deliver		Knowledge Share	
		Unit Price	Driver	Unit Price	Driver	Unit Price	Driver	Unit Price	Driver	Unit Price	Driver	Unit Price	Driver	Unit Price	Driver
Fuel / Power / Energy			therms /hr												
Consumables		>>		4.86	£/t CO2		<<		<<						
Waste disposal		>>		0.31	£/t CO2		<<		<<						
Maintenance		>>		505,251	£/mth		<<		<<						
Staff		>>		296,333	£/mth		<<		<<			125,000	£/mth		
Rates		>>					<<		<<		424,856	£/mth			
Insurance		>>					<<		<<		424,856	£/mth			
Overheads		>>		200,396	£/mth		<<		<<			125,000	£/mth		
Lease Costs		>>					<<		<<						
Other Fixed Costs		>>					<<		<<					238,492	£/mth
Provision for Decommissioning															

Transport (£m)	Segment:	New Pipeline		Feeder10		St Fergus		Project Management		Advance Works		<b>Inputs to Pricing Model:</b>			
		Unit Price	Driver	Unit Price	Driver	Unit Price	Driver	Unit Price	Driver	Unit Price	Driver				
Fuel / Power / Energy						0.04533	MWh/t CO2								
Consumables												0.04533	£/t CO2		
Waste disposal												58,333	£/t CO2		
Maintenance				58,333	£/mth							350,000	£/mth		
Staff												4,167	£/mth		
Rates					4,167	£/mth						33,333	£/mth		
Insurance						33,333	£/mth					602,000	£/mth		
Overheads															
Lease Costs															
Other Fixed Costs															
Provision for Decommissioning															

Storage (£m)	Segment:	Offshore Pipeline		Facilities & Logistics		Wells & Reservoir		Monitoring		Contingency		<b>Inputs to Pricing Model:</b>			
		Unit Price	Driver	Unit Price	Driver	Unit Price	Driver	Unit Price	Driver	Unit Price	Driver				
Fuel / Power / Energy				4,169	£/mth							4,169	£/mth		
Consumables				7,850	£/mth							7,850	£/mth		
Waste disposal				1,667	£/mth							1,667	£/mth		
Maintenance	manual profile	manual profile	manual profile												
Staff				177,682	£/mth			25,000	£/mth			202,682	£/mth		
Rates															
Insurance				178,233	£/mth							178,233	£/mth		
Overheads												8,333	£/mth		
Lease Costs						8,333	£/mth					95,858	£/mth		
Other Fixed Costs				95,858	£/mth			manual profile	manual profile						
Provision for Decommissioning															

NB Operating costs will be imported into the Pricing Model. This will apply various macroeconomic forecasts and operating profiles to calculate the annual costs

ABEX

units: 1,000,000 s

(£m)	Segment:	SPS	CCP	Comp.	BoP	Site - Other	NewPipe	Feeder10	StFergus (Blackhill)	Offshore Topsides & Substructure	Wells	Pipelines	Onshore Facilities	Post COP	Total
		23.0	45.6	9.4	23.9	-	16.3	15.8	24.2	25.7	39.3	31.4	1.5	25.2	
Abandonment Expenditure															281.3
[Category 2]															0.0
[Category 3]															0.0
[Category 4]															0.0
[Category 5]															0.0
[Category 6]															0.0
<b>Total AbEx:</b>		<b>23.0</b>	<b>45.6</b>	<b>9.4</b>	<b>23.9</b>	<b>-</b>	<b>16.3</b>	<b>15.8</b>	<b>24.2</b>	<b>25.7</b>	<b>39.3</b>	<b>31.4</b>	<b>1.5</b>	<b>25.2</b>	<b>281.3</b>
		102.0					56.2				123.1				0.0