

ERF ROLL OUT

DELIVERING RELENTLESS PREDICTABILITY

DELIVERING THE ERF PORTFOLIO FOR PENNON

OPPORTUNITIES TO GROW

**DELIVERY OF
STRATEGIC UK-WIDE
ERF ASSET BASE**

**ENSURING WORLD
CLASS SAFETY
PERFORMANCE
ACROSS THE
PORTFOLIO**

**BUILDING TOWARDS
RELENTLESS
PREDICATABILITY**

**REALISING THE
VISION FROM
CONSTRUCTION TO
OPERATION**

**DRIVING
PROFITABILITY
THROUGH DE-
RISKING AND
ENHANCING THE
PORTFOLIO**

**CREATING A
PATHWAY FOR THE
ADOPTION OF NEW
TECHNOLOGY**

VIRIDOR ERF BUILD OUT

DELIVERING A STRATEGICALLY LOCATED UK-WIDE ENERGY PORTFOLIO

NEARING COMPLETION:

11 NATIONAL SOCIAL
INFRASTRUCTURE ASSETS

OPTION OVER 1 FURTHER FACILITY
(AVONMOUTH)

8 FACILITIES

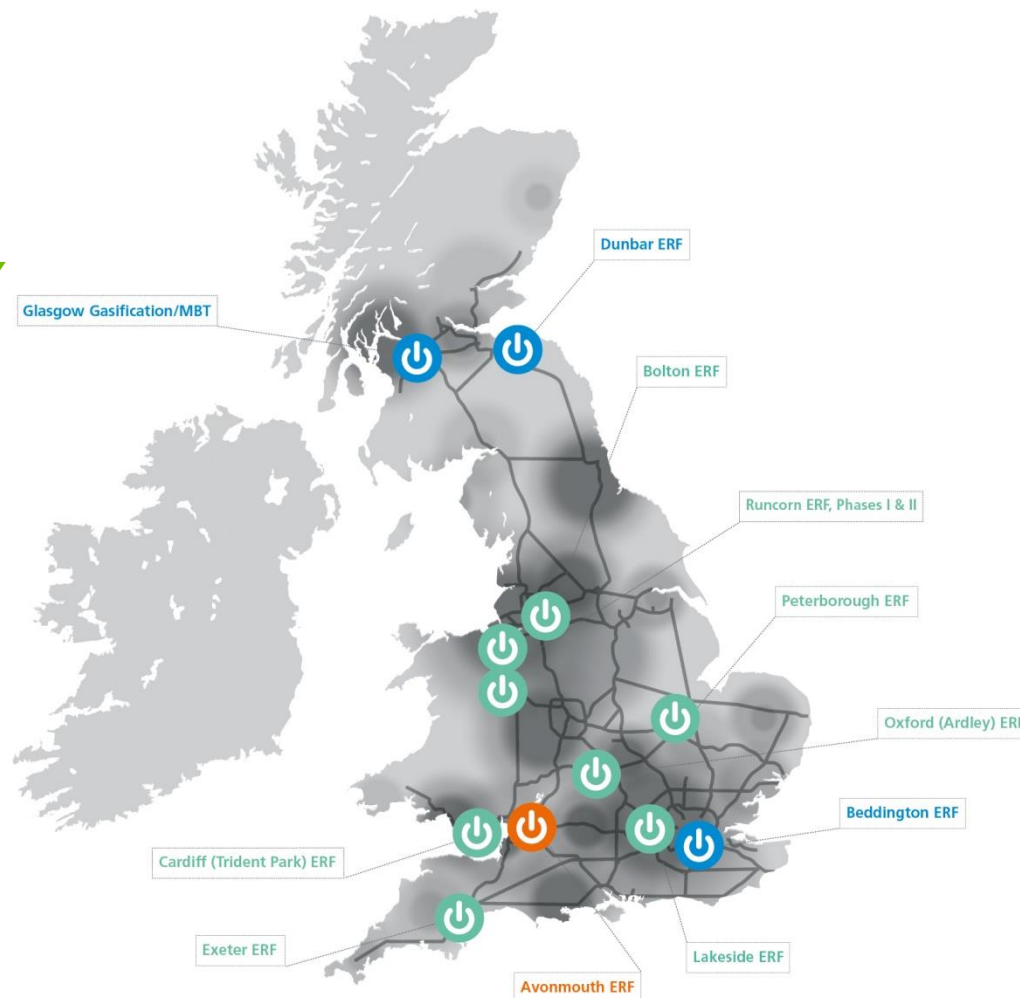
 In operation

3 FACILITIES

 Under construction

1 FURTHER

 Consent achieved

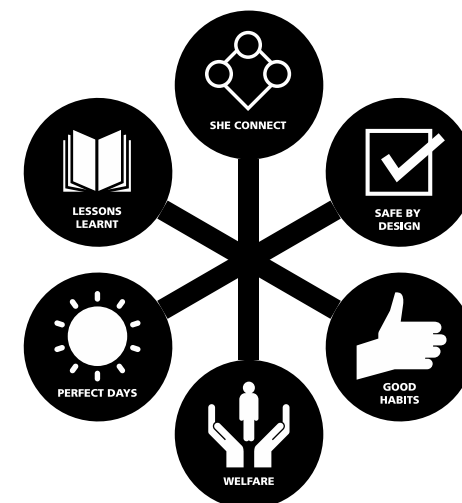


DELIVERY PRINCIPLE: RELENTLESS PREDICTABILITY

WORLD CLASS HEALTH & SAFETY ACROSS THE PORTFOLIO

SITES - ENERGY	STATUS	AFR ⁽¹⁾ (THIS MONTH)	RATING
Glasgow RECC	In commissioning	0.100	World Class
Runcorn II ERF	Complete	0.107	Excellent/World Class
Peterborough ERF	Complete	0.376	Average
Ardley ERF	Complete	0.084	World Class
Cardiff ERF	Complete	0.062	World Class
Beddington ERF	In construction	0	World Class
Exeter ERF	Complete	0	World Class
Dunbar ERF	In construction	0	World Class

SITES - RECYCLING	STATUS	AFR ⁽¹⁾ (THIS MONTH)	RATING
Newhouse Glass Plant	Complete	0	World Class
Plymouth Recycling Plant	Complete	0	World Class
Perth Recycling Plant	Complete	0	World Class
Rochester Plastics Plant	Complete	0	World Class
Sheffield Recycling Plant	Complete	0	World Class



(1) <0.1 = World Class, >0.1, <0.17 = Excellent (Better than Olympic Project), >0.17, <0.25 = Good (Typical good construction, e.g. Laing O' Rourke), >0.25, <0.55 = Average (Industry norm = =0.55), >0.55 = Poor (Worse than Construction Industry norm)

CONTINUOUSLY IMPROVING

THE PURSUIT OF RELENTLESS PREDICTABILITY

	EXETER ✓	CARDIFF ✓ OXFORD ✓ RUNCORN I ✓	PETERBOROUGH ✓ RUNCORN 2 ✓	BEDDINGTON ✓ DUNBAR ✓ GLASGOW ✓
	>2013	>2014	>2015-2017	
PROCESSES & FRAMEWORKS	<ul style="list-style-type: none"> Implement Project Execution Process Put in place Project KPI's Establish common basis for working with Standards/Procedures Introduce Knowledge Management & Transfer Establish effective Communications Plan within project portfolio and with key stakeholders Benchmark Status of all Projects 	<ul style="list-style-type: none"> Consistent understanding of project status Transparency & accountability through clear work processes Strong stakeholder management A solid platform for continuous improvement in place & working 	<ul style="list-style-type: none"> Projects deliver business case or better Continue to introduce best practice & innovation Tune KPI's to improve performance 	
SUPPLY CHAIN & VALUE	<ul style="list-style-type: none"> Establish baseline cost estimate, schedule and risk/contingency fund for each Project Put in Framework Agreements to Support us with EPCm Contractors & QS Companies Focus on improving efficiency & predictability Robust oversight of EPC's Good contracts, clear roles & a healthy tension 	<ul style="list-style-type: none"> Strong change, risk & contingency management Benefits of repeat nature of projects in evidence Strong management of interfaces Supply Chain robust 	<ul style="list-style-type: none"> Project delivered safely on time, budget. Quicker & cheaper each time "Blue prints" for the future No Surprises 	
PEOPLE	<ul style="list-style-type: none"> Review capability of existing staff and deal with shortfalls Identify /recruit Key Leaders Build bench strength Bring in experienced People 	<ul style="list-style-type: none"> Building capacity as well as capability Supervision taking more responsibility Succession Planning working Strong team ethos 	<ul style="list-style-type: none"> Great leaders Customer focussed Trusting relationships 	
HSEQ	<ul style="list-style-type: none"> Put in place HSEQ strategy, and implement – drive into Supply Chain Introduce corrective action programme 	<ul style="list-style-type: none"> Improving safety performance No. of Non Conformances falling Improved reliability from supply chain Surveillance in place at Key Suppliers 	<ul style="list-style-type: none"> Zero accidents No environmental events High Quality levels throughout Supply Chain 	

RELENTLESS
PREDICTABILITY



Exeter ERF



Runcorn ERF



Cardiff ERF



Ardley ERF



Peterborough ERF



**Glasgow Recycling and
Renewable Energy Centre**



Beddington ERF



Dunbar ERF

DELIVERING AN INDUSTRY LEADING ERF ASSET BASE

ON TIME, TO BUDGET AND HIGH QUALITY

SITE	CAPITAL COST ⁽¹⁾	GROSS CAPACITY		STATUS	BASE LOAD MUNICIPAL CONTRACT	ACTUAL/EXPECTED COMMISSIONING	OPERATIONS END ⁽²⁾
		Tonnes (000)	Electricity MWe				
Lakeside ⁽³⁾	150	410	38	Fully operational	Merchant	Commissioned	2033
Bolton	N/A	120	9	Fully operational	Greater Manchester	Commissioned	2034
Exeter	48	60	3	Fully operational	Exeter	Commissioned	2044
Oxford (Ardley)	204	300	24	Operational ramp-up	Oxfordshire	Commissioned	2039
Cardiff (Trident Park)	207	350	28	Operational ramp-up	Gwyrdd (SE Wales)	Commissioned	2039
Runcorn I ⁽³⁾	236	375	28 ⁽⁵⁾	Operational ramp-up	Greater Manchester	Commissioned	2039
Runcorn II	217	375	41	Operational ramp-up	Merchant	Commissioned	2039
Peterborough	72	80	7	Operational ramp-up	Peterborough	Commissioned	2046
Glasgow	155	200	15	Moving to early commissioning	Glasgow	H1 2016/17	25 years
Dunbar	177	300	23 ⁽⁶⁾	Construction in progress	Merchant (Preferred Bidder Clyde Valley)	H2 2017/18	25 years
South London (Beddington)	199	275	26	Construction in progress	S London	H1 2018/19	25 years
Sub Total		2,845	242				
Avonmouth ⁽⁴⁾	233	350	28	Planning permission achieved	TBA	TBA	25 years
Grand Total		3,195	270				

(1) Capital cost excludes capitalised interest and for projects for which the Engineering Procurement Construction (EPC) contract has not yet been executed, capital cost may vary in accordance with the Euro exchange rate

(2) Operational period post construction. This is usually the minimum guaranteed plant life

(3) Joint ventures economic interest (Lakeside 50%; Runcorn I 37.5%)

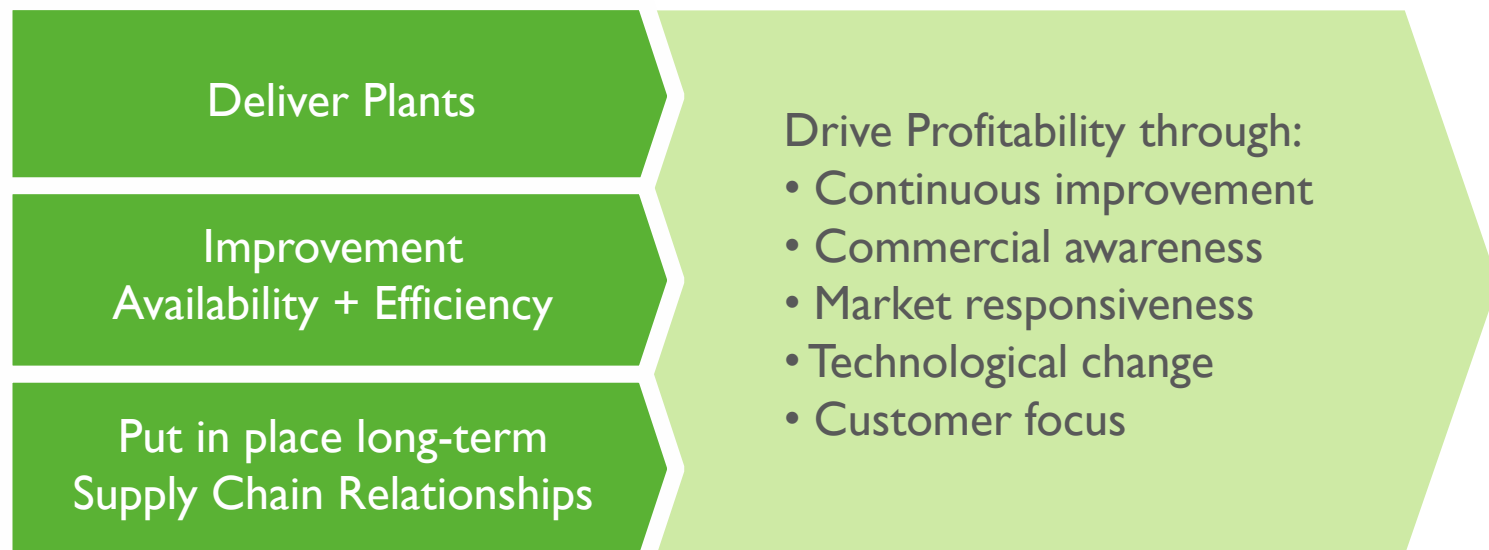
(4) Project is not yet committed

(5) Plus heat 51MWth

(6) Plus heat 17MWth

RELENTLESS PREDICTABILITY DRIVING PROFITABILITY

DE-RISKING AND ENHANCING THE PORTFOLIO



MANAGE RISK

STRONG COMMERCIAL STEWARDSHIP

OPTIMISE OPERATIONS

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