



### **2015 Final Results Presentation**

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## 2015 Highlights

#### redT

- Successful roll-in of minority interests in REDH with the Company now owning 99.7%
- First Gen 1 manufactured market seeding unit delivered and installed
- Continuation of market seeding programme 7 unit placements announced in locations from UK to Africa
- Parallel development of Gen 2 system, driven by new redT design and engineering team
- Change of company name to 'redT energy' and successful post year-end capital raise of £3.3m (net)

#### **Africa**

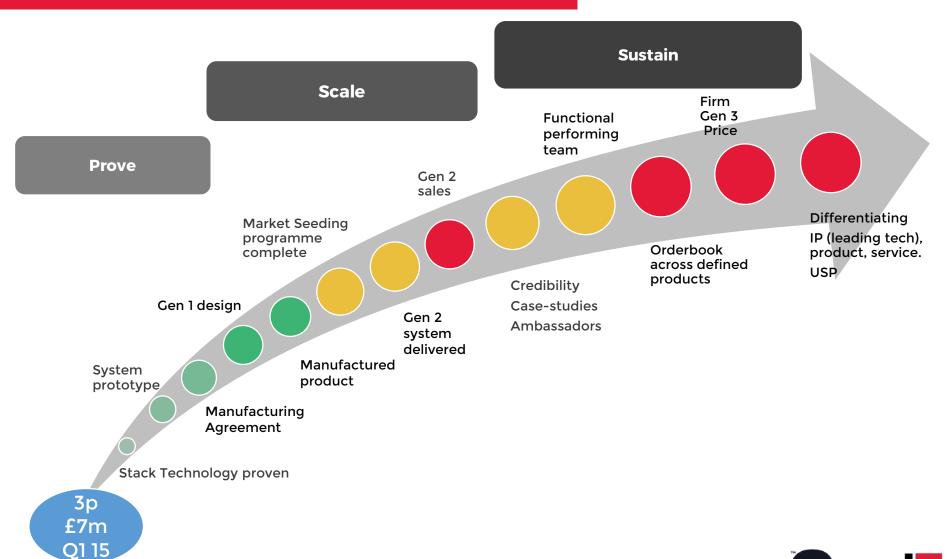
- Awarded joint mandate as manager to REPP
- Successful transition from low margin consultancy services towards dedicated investment advisory business

#### US

- Disposal of US biogas assets; Jerome and Twin Falls facilities
- Sale of US carbon credit portfolio to major multinational corporation

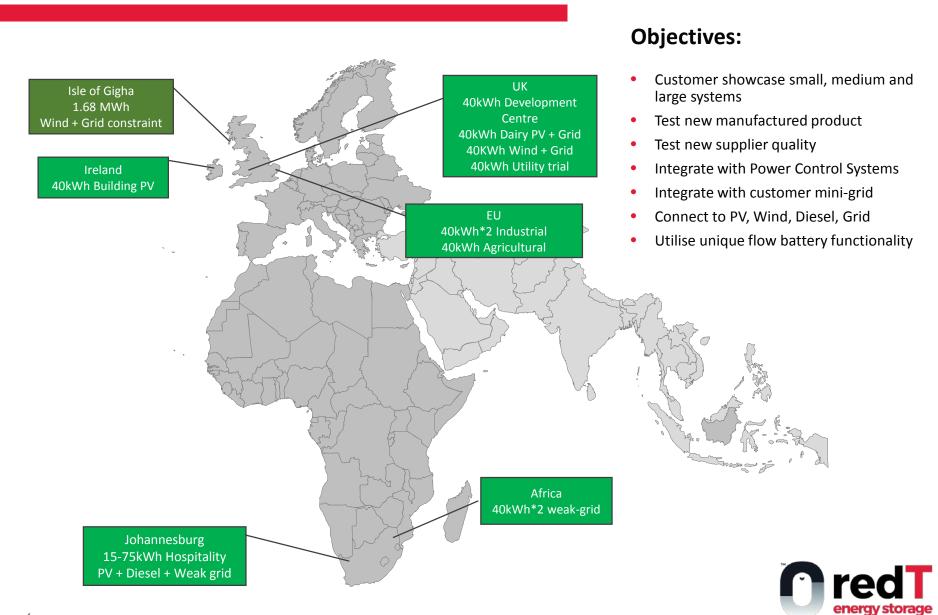


## **Sustainable Equity Value**





## **Market Seeding Program**



### **Generation 2 Product**

- Engineering office established in Livingston
- Design complete for stack, tanks, fluids and casing
- Incorporated learnings from Generation One product
- Cost targets for key parts.
- Ordered long lead supply parts
- Products 5-20kWH and 60-300kWh
- Outcome enhanced functionality and reduced cost





## **Market Opportunity**

#### Grid-tied storage estimated to be 160GW \$10bn p.a., by 2030

- Small grid tied renewables
- Large grid tied renewables
- Distributed generation
- Grid utility
- Key markets EU, USA, China, Japan
- Connected smart power grid would required energy storage worth \$100\$150bn (larger than all other batteries applications put together\*)

#### Off-grid estimated to be \$2bn+ p.a. by 2020

- Diesel generator coupling
- Mini-grid coupled with renewables
- Telcom towers
- Key markets Africa, India, Caribbean, SE Asia



<sup>\*</sup> Goldman research April 2016

## **FY 2015 Financials**



## **2015 Financial Highlights**

- Profit for the year €0.7m (2014: loss €2.2m)
- Net gain on disposal of US biogas assets €2.0m
- Acquisition of REDH business resulting in net €2.0m gain on original investment
- Revenue for the year €11.1m (2014: €5.6m)
- €7.5m in available cash as of 31 March 2016
- Loans and borrowings €Nil



### **Income Statement**

#### Consolidated statement of comprehensive income

For the year ended 31 December 2015

	Restated		
	2015	2014	
	€'000	€'000	
Continuing operations			
Revenue	11,106	5,569	
Cost of sales	(6,267)	(3,194)	
Gross profit	4,839	2,375	
Other income	-	84	
Administrative expenses	(6,340)	(5,152)	
Loss from operating activities	(1,501)	(2,693)	
Financial income	26	26	
Financial expenses	(1)	(4)	
Foreign exchange movement	165	212	
Net financing expense	190	234	
Share of loss of equity-accounted investees	(1,417)	(126)	
Gain on disposal of equity-accounted investees	2,016	-	
Loss before tax	(712)	(2,585)	
Income tax credit	12	70	
Loss from continuing operations	(700)	(2,515)	
Discontinued operations			
Gain from discontinued operations	1,370	332	
Profit for the year	670	(2,183)	
Exchange differences on translation of foreign operations	351	333	
Total comprehensive income for the year	1,021	(1,850)	

2014 restated to show the effect of operations which have been discontinued in the current period.



## **Balance Sheet**

#### Consolidated statement of financial position

At 31 December 2015

At 51 December 2015		
	2015	2014
	€'000	€'000
Non-current assets		
Property, plant and equipment	101	16,613
Goodwill	8,167	-
Intangible assets	6,822	-
Investments in associates and joint ventures	-	2,533
Deferred tax assets	132	109
	15,222	19,255
Current assets		
Prepayments and accrued income	381	1,896
Trade and other receivables	1,058	1,591
Other financial asset	2,420	-
Cash and cash equivalents	2,935	4,057
Assets held for sale	-	-
	6,794	7,544
Total assets	22,016	26,799
Current liabilities		
Loans and borrowings	-	(384)
Trade and other payables	(5,522)	(3,711)
Deferred income	(408)	(357)
Corporate tax payable	(150)	(186)
	(6,080)	(4,638)
Non-current liabilities		
Loans and borrowings	-	(11,747)
Deferred income	(250)	(4,251)
	(250)	(15,998)
Total liabilities	(6,330)	(20,636)
Net assets	15,686	6,163

	2015	2014
	€'000	€'000
Equity attributable to equity holders of the parent		
Share capital	4,098	2,461
Share premium	85,375	76,917
Share-based payment reserve	773	756
Retained earnings	(73,823)	(74,513)
Translation reserve	893	542
Other reserve	(1,621)	-
Non-controlling interest	(9)	-
Total equity	15,686	6,163



## **Cash Flow**

#### Consolidated statement of cash flow

for the year ended 31 December 2015

Net cash outlfow from operating activities

	2015	2014		2015	2014
	€'000	€'000		€'000	€'000
Cash flows from operating activities			Cash flows from investing activities		
Profit for the year	670	(2,183)	Proceeds from disposal of a discontinued ops.	731	-
			Acquisition of a subsidiary, net of cash acquired	607	-
Adjustments for:			Acquisition of property, plant and equipment	(52)	(31)
Depreciation, amortisation and impairment	34	1,063	Disposal of property, plant and equipment		84
Amortisation of deferred income	-	(313)	Net cash inflow from investing activities	1,286	53
Foreign exchange (gain) / loss on translation	(165)	113		_	_
Financial income	(26)	-	Cash flows from financing activities		
Financial expense	1	745	Proceeds from the issue of share capital	-	1,657
Impairment of receivables - bad debt write-off	-	60	Proceeds from new loan	-	625
Share of loss of equity accounted investees	1,417	126	Repayment of borrowings	-	(260)
Gain on disposal of equity-accounted investee	(2,016)	-	Interest received	26	26
Gain on sale of discontinued operations, net of tax	(1,370)	-	Interest paid	(1)	(771)
Gain on sale of fixed assets	-	(84)	Net cash inflow from financing activities	25	1,277
Equity settled share-based payment expenses	17	110			
Taxation	(12)	(124)	Net (decrease) in cash and cash equivalents	(1,236)	(450)
	(1,450)	(487)	Net cash and cash equivalents at 1 January	4,057	4,472
			Effect of exchange rate fluctuations on cash held	114	35
(Increase)/decrease in trade and other receivables	121	(586)			
(Decrease) in trade and other payables	(1,218)	(707)	Net cash and cash equivalents at 31 December	2,935	4,057
	(1,097)	(1,293)			

(2,547) (1,780)



Note: post balance sheet cash @ Mar16 = €7.5m

## **Segmental Analysis**

#### Operating segments

For the year ended 31 December 2015

Tor the year ended 31 becomber 2013	US		Afric	Africa REDT			Group (Other)		Consolidated	
	Restated		Restated		Restated		Restated		Restated	
	2015	2014	2015	2014	2015	2014	2015	2014	2015	2014
	€′000	€′000	€′000	€′000	€′000	€′000	€′000	€′000	€′000	€′000
Segment revenue	4,812	1,979	1,198	779	21	0	5,076	2,811	11,106	5,569
Segment gross margin	3,315	713	1,089	584	(71)	0	506	1,077	4,839	2,375
Other income – gain on disposal	0	84	0	0	0	0	0	0	0	84
Segment administrative expenses	(1,879)	(1,500)	(959)	(710)	(450)	0	(3,035)	(2,832)	(6,340)	(5,152)
Segment result / operating activities	1,436	(703)	130	(126)	(521)	0	(2,529)	(1,754)	(1,501)	(2,693)
Finance income									26	26
Finance expense									(1)	(4)
Foreign exchange movement									165	212
Share of loss of equity accounted investees									(1,417)	(126)
Gain on disposal of equity-accounted investees									2,016	0
Taxation									12	70
Gain/(Loss) from discontinued operation	1,671	274	(301)	58	-	-	-	-	1,370	332
Profit/(Loss) for the year									670	(2,183)
Exchange differences on translation of foreign ops									351	333
Total comprehensive income for the year									1,021	(1,850)

 $2014\,restated\,to\,show\,the\,effect\,of\,operations\,which\,have\,been\,discontinued\,in\,the\,current\,period.$ 



### **Commentary**

#### US

- > Activity from continuing operations based on management and sale of Californian Carbon Offsets (CCOs), culminating in rights assignment to major multinational corporation for €2.3m
- > Outlook focused on the management of the disposed biogas assets for which business was awarded a service contract

#### Africa

- > Successful transition away from low margin consultancy services towards a dedicated investment advisory business
- > Investment advisory built upon current co-advisory mandate to GAP with the recent addition of the mandate to manage REPP

#### redT

> Group consolidated numbers equate to three months (Oct-Dec15 -> post acquisition)

#### **Group (Other)**

> Primarily historic carbon activity €4.8m, plus addition of pre-acquisition redT recharges €0.3m

#### **Administration Expenses**

- > Increase from continuing operations for the first time in three years, directly as a result of the major Group structural changes
- >> Sale of US biogas (€0.3m), REDH acquisition (€0.15m), redT consolidation (€0.45m), growth of Africa Investment Advisory (€0.2m)

#### Acquisition of REDH (redT)

> Acquisition during the year (99.7%) resulted in €2m gain on original investment, offset by (€1.4m) share of pre-acquisition loss

#### Discontinued Operations - US biogas, Kenya, Tanzania

- > Sale of US biogas assets resulting in €2m net gain from disposal, and reclassification of trading activity for the year (€0.4m)
- > Kenya and Tanzania deemed non-core to the business strategy reclassified as Assets Held for Sale (nil value)
- >> Reclassification in the year resulted in loss to discontinued operations; Kenya (€0.2m) / Tanzania (€0.1m)



## **Conclusions**



### Conclusion

#### redT

- Market seeding programme progressing (Gen 1)
- Design and engineering process for Gen 2 underway
- Strong customer demand for proven, low cost model

#### US

• Disposal of US assets (biogas & carbon), generating cash investment

#### **Africa**

- Growth within investment advisory business
  - Addition of REPP alongside existing GAP mandate
- Restructured Africa business now cash positive

#### Cash

Strong cash position at 31 March 2016 to enable Group to progress redT development

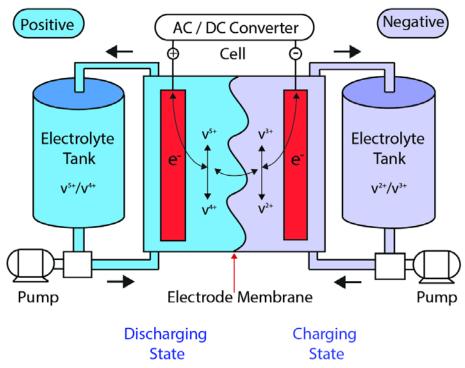


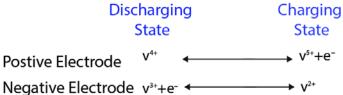
# **Appendix**



### **Appendix 1: Liquid Energy Storage**

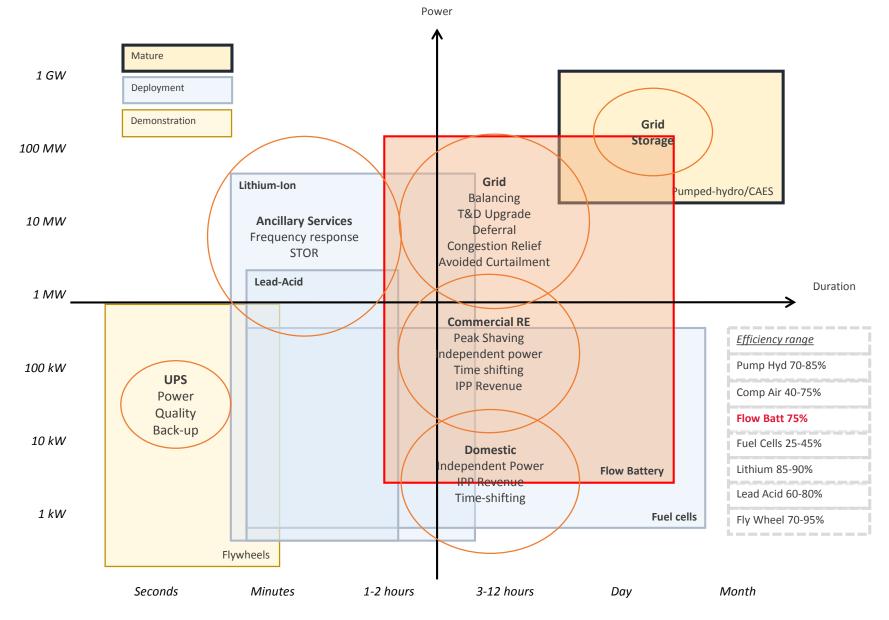
- Conventional batteries have fixed power and energy locked together in the cell
- Flow battery uses liquid electrolyte contained outside the cell and pumped through it – like a car engine and fuel tank
- Liberates energy from power component allowing long duration storage that doesn't deteriorate and can be scaled to your exact needs



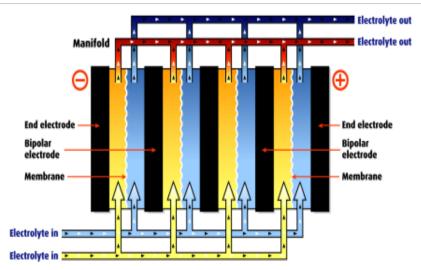




## Storage market place - very different uses & products



### **Appendix 2: The Stack**





- Electrolyte pumped through 40 cells in series to give 48V output
- Energy remains in liquid electrolyte

   avoids imperfectly reversible
   transition from liquid to solid that
   reduces capacity of conventional
   batteries
- All vanadium chemistry avoids contamination issues
- Proven operation over several years in test centre – low impedance, high integrity



### **Appendix 3: Benefits of VRFB Storage**

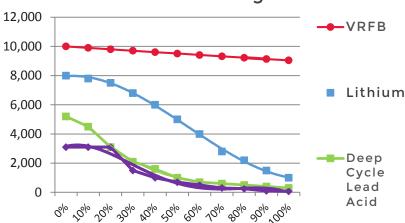
#### Flow batteries:

- Decouple power from duration size to your needs
- Deep discharge use the full capacity
- Long life match to your renewables
- Charge retention don't lose power when you don't use power
- Value retention recycle and resell electrolyte
- Modular and flexible 5kW to 10MW, 3 hours to 3 days
- Resistant to capacity fade
- Low maintenance
- High cycling always available
- Environmentally friendly and safe

#### Conventional batteries:

- Short life expectancy
- Need to oversize as DoD limited
- High labour cost of change outs and maintenance
- Need to integrate rack, enclosure, control, thermal mgmt
- Warranty validity issues due to strict operational parameters
- Problems decommissioning

# Battery Life Cycle based on Depth of Discharge



#### **Conclusion:**

Conventional batteries are not ideal for high cycling applications



### **Appendix 4: Applications**



#### Renewable Energy

A key problem in supplying renewable energy to the grid is the mismatch between availability and demand. Storage coupled with renewable provides base load power



#### Utility

Grid networks are less reliable with intermittent power from renewables. Efficient and low cost storage can provide balanced base load power and avoid costly capital upgrades



#### Telco

To provide wide coverage telecommunications station often need to be installed in remote locations with weak to no grid connection so diesel run generators required storage support to be run efficiently



#### Diesel Efficiency

A diesel gen-set can run 3 times more efficiently at full loads than low loads. Coupled with energy storage diesel gensets can then provide low cost power.



#### Hospitality

To provide essential power for hospitality, retreats, eco lodges, safari camps operators require diesel run generators which are costly to operate with energy storage

