

# Kedco plc

## LSE 26<sup>th</sup> March 2010



## Kedco plc summary

- **Well Established Projects and Pipeline**
- **4MW project currently in building and commissioning, expected on stream H2 2010**
- **3 projects in which Kedco/partners have full planning and permitting awaiting finance with aggregate capacity of 6MW**
- **4 MW Latvian project on our site**
- **12 MW project is in final permitting expected on stream H2 2011.**
- A further 12 projects with LOIs with potential aggregate capacity of 32 MW
- Significant project pipeline already in place with 102MW of potential aggregate capacity
- Strategic Objective to achieve 250MW of operating capacity by 2015
- Each MW costs 3.5 million euro on average
  
- **Business Model and Mitigation of Risk**
- Use of third party technology for anaerobic digestion (food waste) and gasification (wood waste)
- Fast payback of equity investment in biomass project
- Equity co-investment option by biomass feedstock owners
- Low financial leverage (65%,)
- Long term locked in feedstock contracts and facility site leases
- Guaranteed off take agreements through long term PPAs and sale of ROCs
- Triple revenue stream: development fee, management fee, share of profit

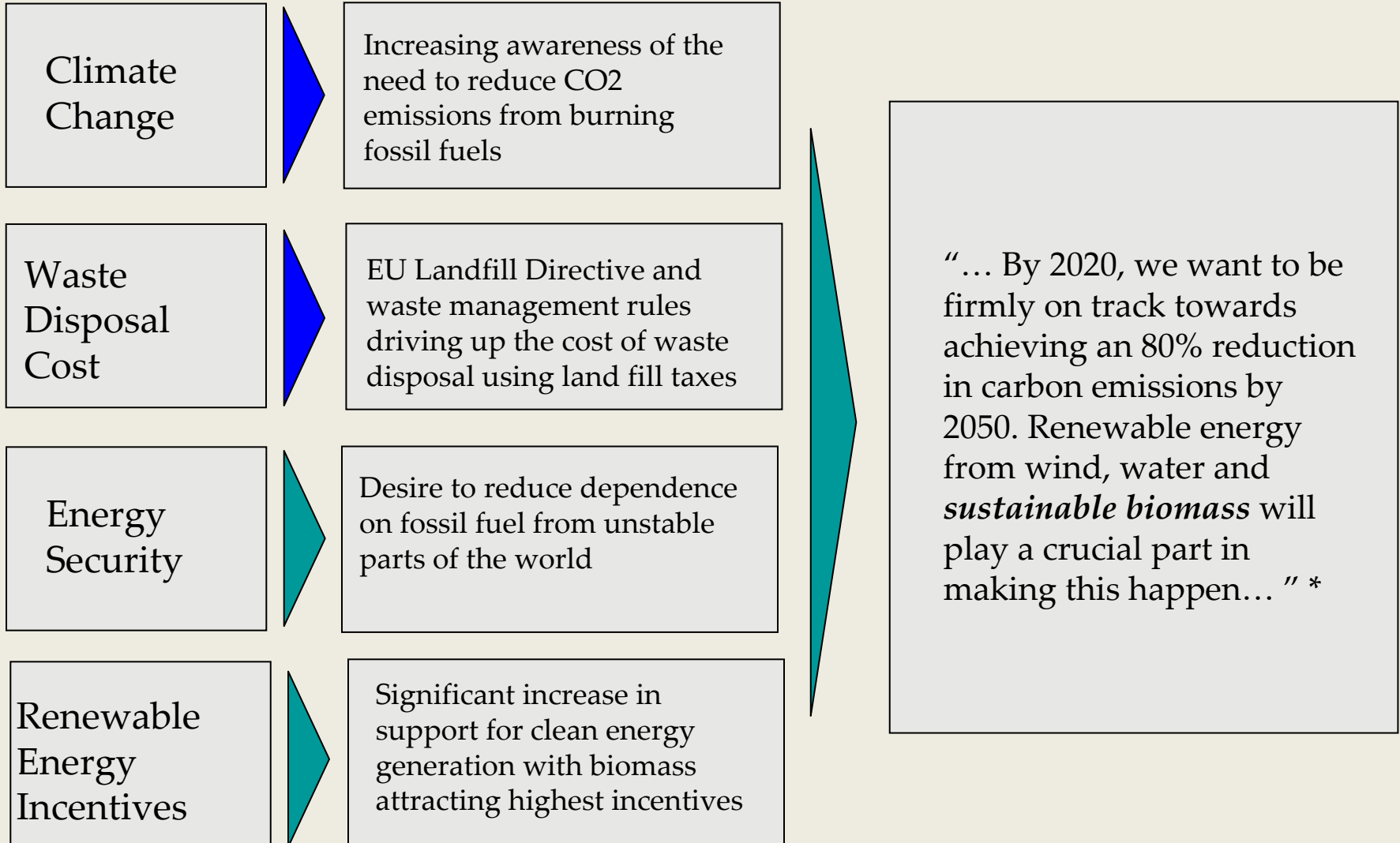
## Exciting, Early to Market Strategy

- 2 ROCs for “advanced technologies” transforms economics – right place, right technologies, right time
- Company is aware of the “land grab” for feedstocks occurring in the biomass industry and is focused on converting its existing project pipeline
- Biomass is expected to be one of the largest contributors to renewable energy in Europe
- Biomass is now where the wind industry was 5 years ago and Kedco the leading developer in this space.

## Large Addressable Market

- Project shortfall in UK generation vs. consumption in the upcoming years
- Over 4,500 similar plants operating in Germany – less than 20 in UK
- In order to keep the National Grid’s preferred reserve margin above 20% (enough reserves to avoid brownouts on grid at peak times) it is estimated that an additional 11.8 GW of dependable (i.e. not wind) capacity will be needed by 2016 in the UK
  - 20% of the EU’s energy consumption must come from renewable sources by 2020
  - Growing demand for electricity
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# Renewable Energy Market Drivers Creating Opportunity



\* Source: UK Department of Energy and Climate Change – Consultation on Renewable Electricity Financial Incentives 2009

## Regulatory Framework and Incentives

- The EU has committed itself to the target of increasing the share of renewables in energy use to 20% by 2020
- The UK government has designed the Renewable Obligation (RO) mechanism to translate this target to electricity generation and provide an incentive system based on RO Certificates (ROCs) which are sold in addition to the electricity.
- The Renewable Obligation is currently set at 9.7% and is scheduled to increase to 15.4% by 2015
- ROCs are fully tradable certificates issued per MWhr of generation that are purchased by companies seeking to meet their Renewable Obligation
- The ROC system provides different levels of financial incentive for generating technologies with Kedco's projects eligible for two ROCs per MWhr of generation

Technology	ROC Banding/Credit
Co-firing of Biomass	0.5
Sewage Gas	0.5
Landfill gas	0.25
Hydroelectric	1
Onshore wind	1
Energy from waste with CHP	1
Standard gasification	1
Standard pyrolysis	1
Co-firing of Biomass with CHP	1
Offshore wind	1.5
Co-firing of energy crops with CHP	1.5
Dedicated Biomass	1.5
Wave/Tidal	2
Solar photovoltaic	2
<b>Advanced gasification</b>	<b>2</b>
Advanced pyrolysis	2
<b>Anaerobic digestion</b>	<b>2</b>
Dedicated Biomass with CHP	2
Dedicated energy crops with CHP	2

# Technology 1: Anaerobic Digestion

- Anaerobic digestion technology is very well established with circa 8,000 AD plants currently in operation in Europe with 4,700 in Germany alone
- Anaerobic digestion involves a process in which micro-organisms break down biomass feedstock (plant and organic waste) in the absence of oxygen
- This process produces a methane/carbon dioxide rich “biogas” suitable for energy production
- Biogas is fed into a CHP plant which utilises it to produce energy (electric and thermal)



# Technology 2: Gasification

- Gasification is a well established technology widely in use to generate electricity from coal. GE alone have 21 wood gasification plants currently operating in Europe.
- Gasification is a process that converts carbonaceous materials, such as biomass, into carbon monoxide and hydrogen
- The syngas is pumped through a filtration system into an engine where it is burned to produce electricity/heat
- Any organic material can be gasified although wood products are favoured





# Current Company Status



- **Experienced and Knowledgeable Management Team**
- Have successfully developed 100kw gasification project to commissioning generation and grid connection
- Have successfully developed first 2MW plant to the point of commissioning
- Experience in project development and cleantech energy
- Have commissioned, installed and sold over 800 heat only biomass plants ranging from 16Kw to 2 MW
- Have a very successful sawmill operating in Latvia which will generate an EBIDTA of 1 million Euro to the 30<sup>th</sup> June 2010. (now non core)
- Committed employees well motivated aligned to the company needs with a strong culture of work.
- Acknowledged by industry as being the top player in AD and Gasification space.
- Larger Investment discussions with many companies moving onto next steps.

# Partners



- Clarke Energy
  - Engines
- Zeropoint
  - Gasification
- Agrikomp
  - Wet AD
- Bekon
  - Dry AD
- CPC
  - Small gasification
- Duggan Brothers
  - Construction
- Existing Shareholders



# Share price at Start

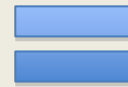


**London**  
Stock Exchange

- 25/02/10 = €0.10



- € present strategy



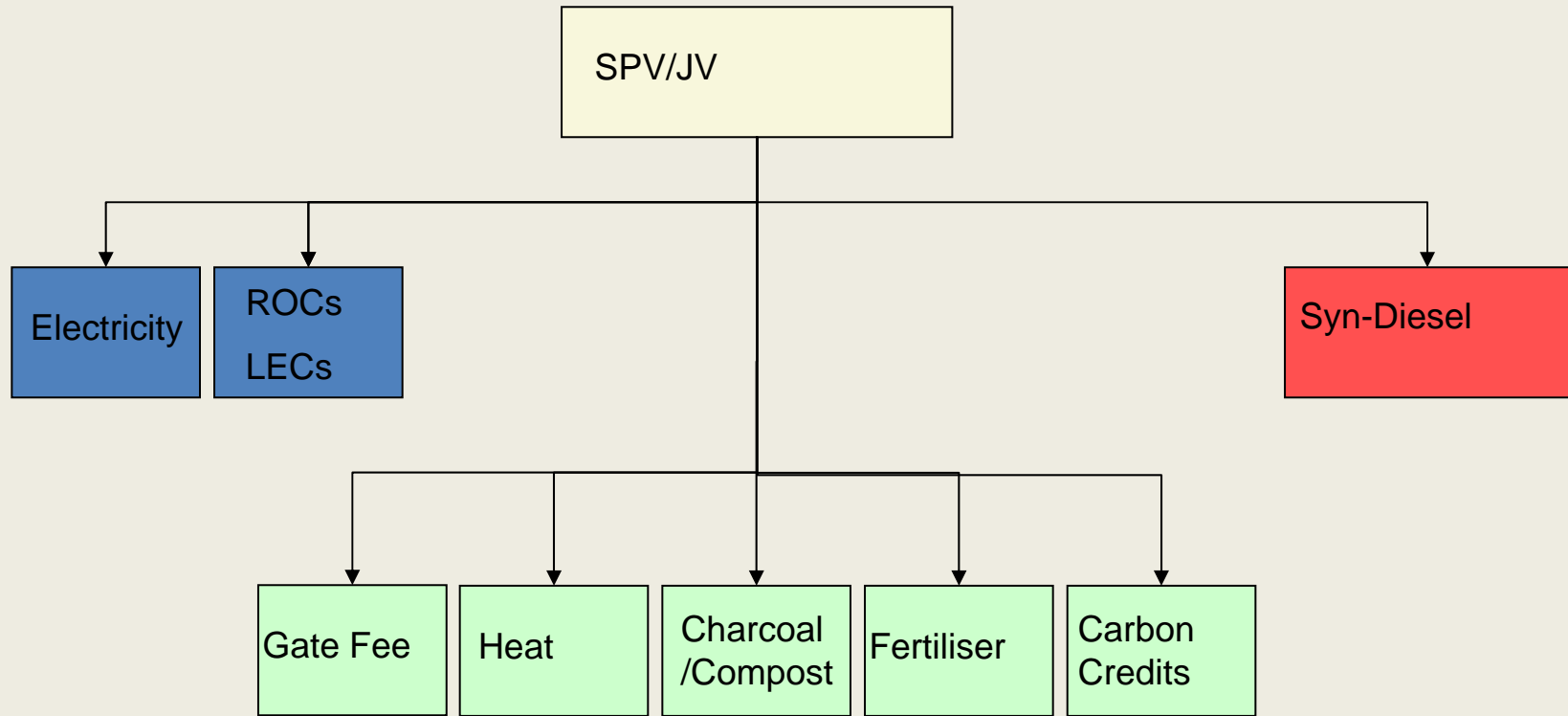
- 30/06/12=€0.XX plus

# Projects

- Kedco's first Gasifier
  - CPC Unit Installed at head office
  - grid connected and producing electricity 100kw
  - from waste wood and AD pellets
- Newry project
  - well advance construction completed
  - 50 hours of running in FAT
  - first 2 MW of has arrived in the UK
  - Second 2 MW in H2
- 5 Planning's achieved
- Agrikomp UK
  - 50/50 joint venture
  - Service the UK market
  - One of the largest AD firms in Europe

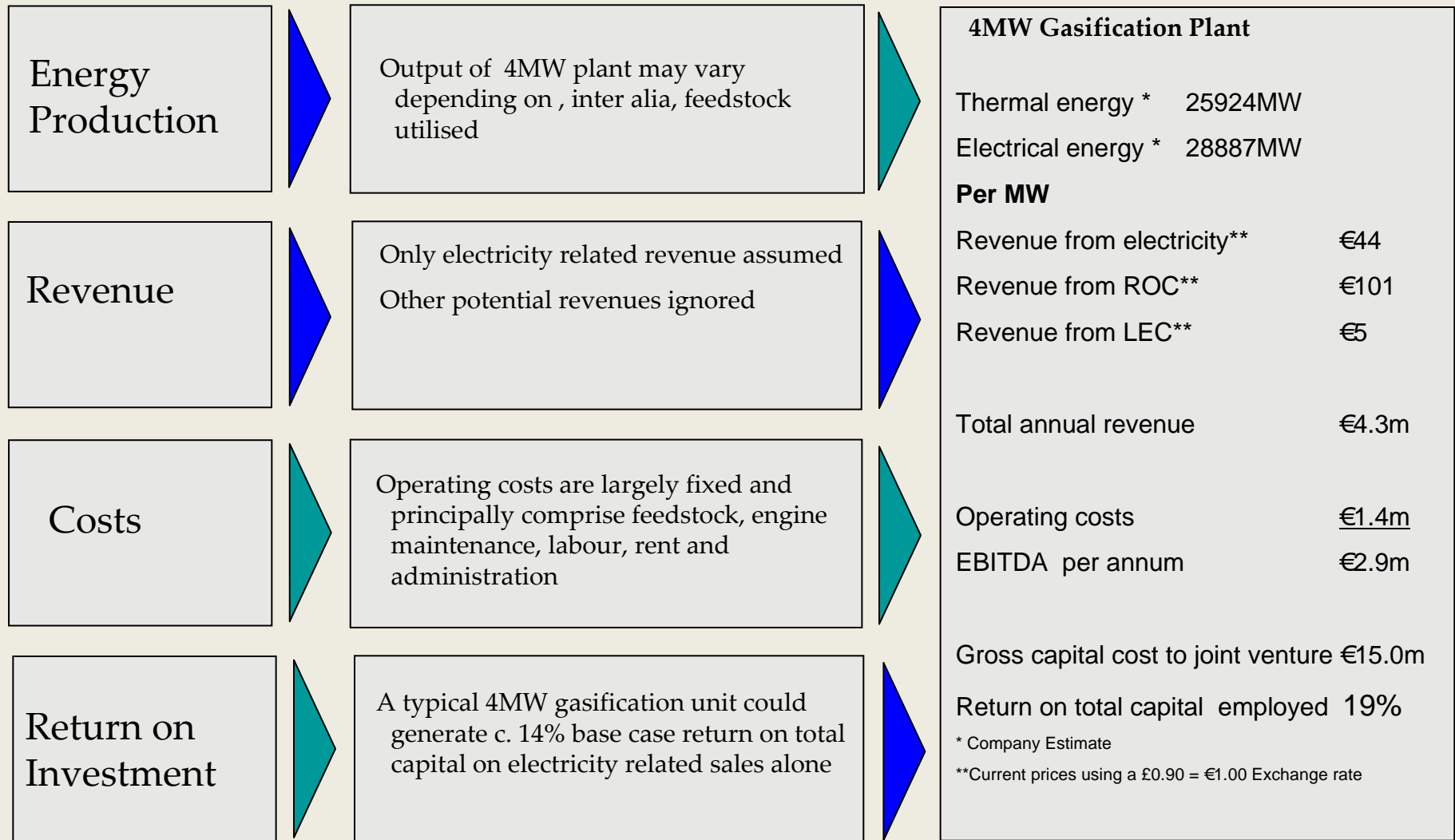


# Sources of project revenue



- Base case revenue inputs
- Potential sources of additional revenue from current outputs
- Potential sources of additional revenue from future outputs

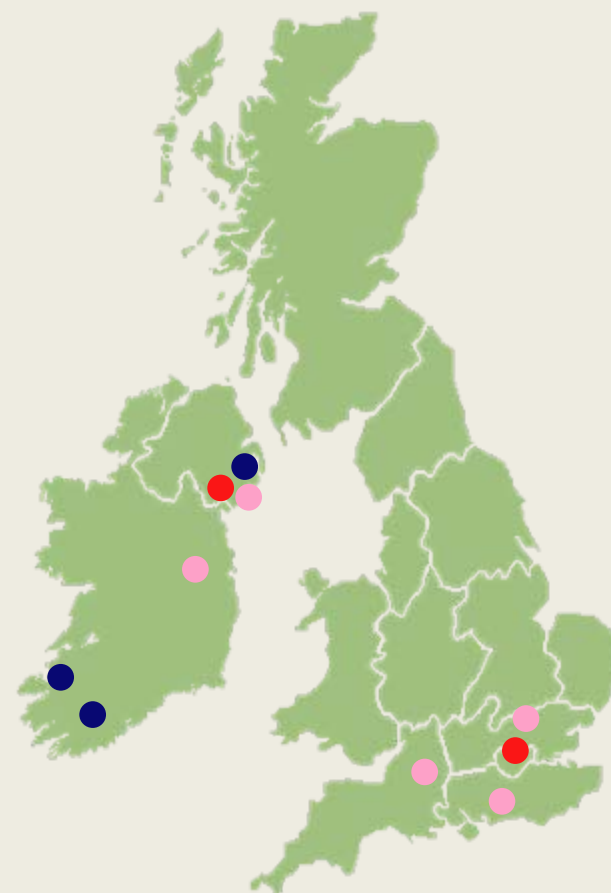
## Illustrative project economics – 4MW Gasification Plant (UK)



# Project Pipeline

UK & Ireland opportunities	Number of projects	Capacity (MW)	Estimated Operational date(s)
In Construction	1	4	Q4 2010
Partner in place. Advanced stages of planning and permitting. Preliminary construction commenced	1	12	Q3 2011
Partner and full planning in place. Construction ready pending finance	3	6	Q2 2011
Binding Letters of Intent signed with partner(s). Early stages of planning/permitting	5	10	Q2 2012
Non-Binding Letters of Intent signed with partner(s). Project feasibility and planning submission being prepared	7	22	Q4 2012
<b>Advanced projects</b>	<b>17</b>	<b>54</b>	
<b>Earlier Stage projects</b>			
Planning analysis, site analysis and advanced negotiations with partners in progress*	12	48	Q4 2012 / Q 1 2013
<b>Pipeline Summary</b>	<b>29</b>	<b>102</b>	

\* Kedco is in preliminary discussions in respect of a large number of potential projects. The Directors expect that circa 12 projects (average of 4MW each) will be pre qualified into the Company's project pipeline



- Anaerobic Digestion
- Construction
- Planning/permitting

(Note: only 10 most advanced projects identified on map)

- Risk mitigation central to model
  - ✓ Use of established third party technology
  - ✓ Locked in feedstock supply
  - ✓ Significantly reduced technology risk through the use of tested and proven technologies
  - ✓ Guaranteed off take agreements for energy produced
  - ✓ Revenue stream: development fee, share of profits
  - ✓ Experienced management – 100 kw plant installed and 2 MW plant on point of commissioning over 800 heat only biomass plants

## Summary

- **Highly favourable incentive** and demand policies for UK biomass will drive rapid sector expansion
- Market growth (Defra wants to establish 1000 AD plants)
- FIT scheme
- Kedco Has 30 identified projects with further inquiries everyday
- The company believe they have an early mover advantage in biomass “**land grab**” through extensive project pipeline
- 3 year outlook
  - ✓ **Add to generational present capacity**
  - ✓ **Reoccurring revenue** from built Projects
  - ✓ Margin from development fees

# Appendices

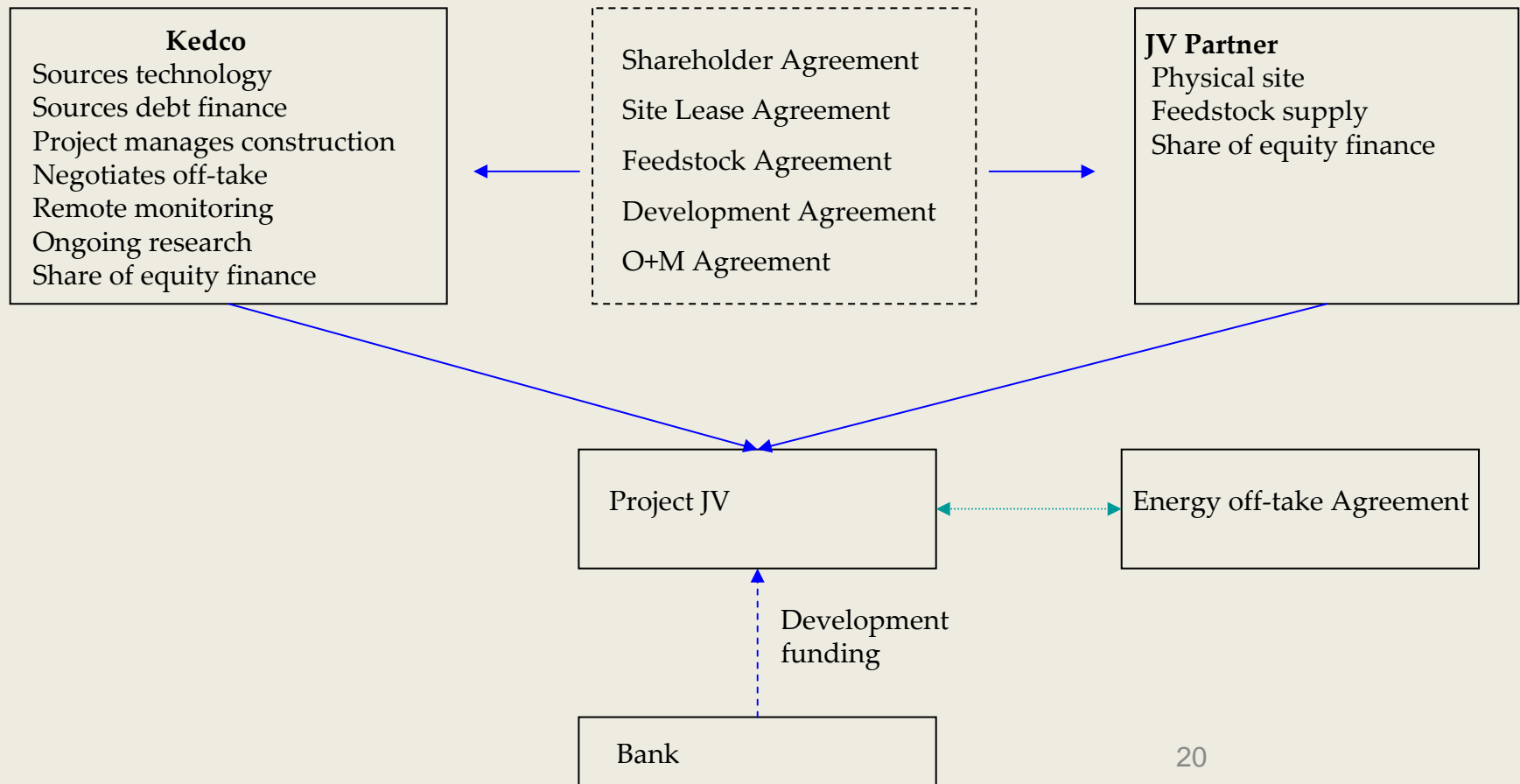
## Financials – Income Statement

Financial Year 30 June Numbers in €'000	Total FY 2008	Energy & Vudlande	Kedco Power	Head office	Total FY 2009
Revenue	9,016	5,914	-	-	5,914
Trading Loss before one off items	▼ (3,816)	▼ (918)	▼ (1,417)	(1,193)	(3,528)
IPO Costs				(946)	(946)
Other items					
Trading Profit (Loss)	(3,816)	(918)	(1,417)	(2,139)	(4,474)
Dep'n & Amort	(737)	(1,094)	(14)	(82)	(1,190)
Operating Profit/(Loss)	▼ (4,553)	▼ (2,012)	▼ (1,431)	▼ (2,221)	▼ (5,664)
Finance Cost	(796)				(577)
Profit/(Loss) before tax	(5,349)				(6,241)

- Revenue has fallen between FY 2008 and 2009 mainly due to the shorter accounting period (12 v 14 months) and discontinuing of certain non profit centre
- Kedco Energy and Vudlande are currently operating at a breakeven level and expected to be profitable in the current financial year
- Kedco Power is at a pre revenue stage. The first two developments are currently under construction and are expected to be operational Q1 2010. Costs of construction are included in fixed assets. The operational costs of €1.4m mainly relate to the 15 staff involved in sourcing, negotiating and project managing projects/potential projects in the Kedco Power pipeline
- Head office costs were c.€1.2m in FY 2009, excluding the costs of IPO and mainly consist of wages and finance costs

# Project Structure

- Kedco will develop operational assets in joint venture with partners typically on a 50/50 equity basis
- Partners will be owners/suppliers of the feedstock for each respective development
- Project Structure ensures a guaranteed feedstock supply for the plant and reduces the net equity cost of each development



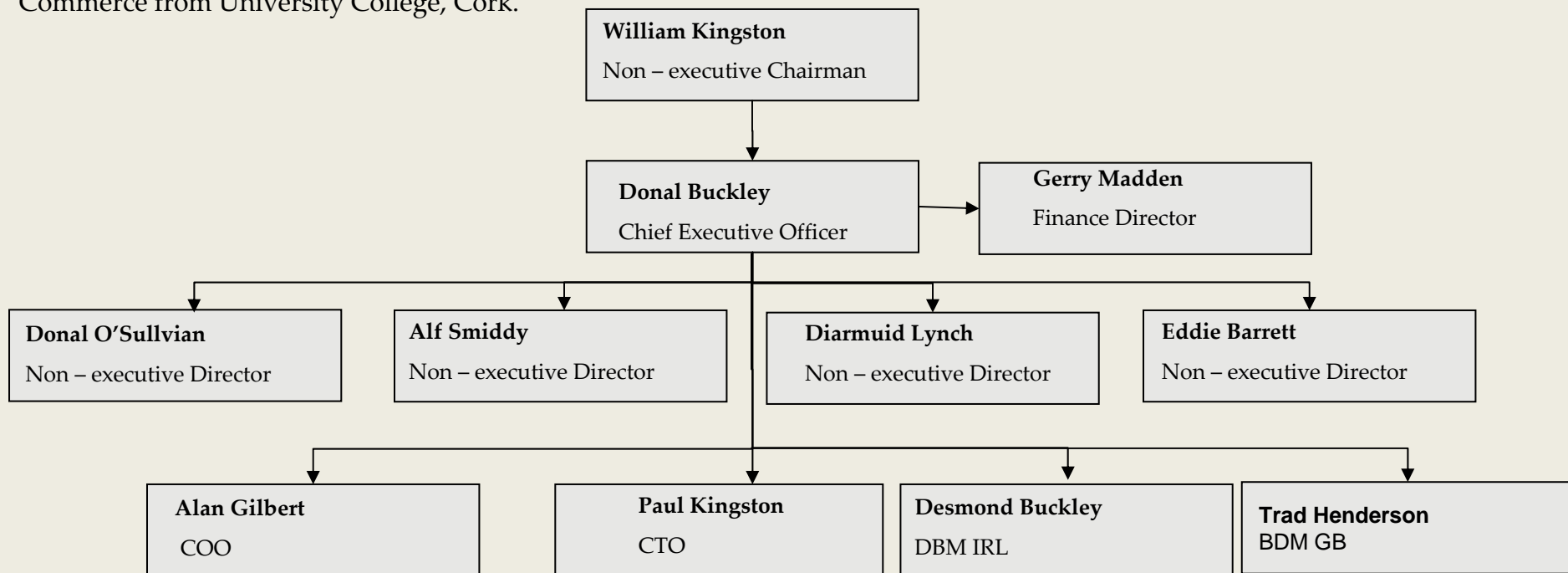
# Board and Senior Management

## Donal Buckley Chief Executive Officer

Donal Buckley is one of the four original founders of Kedco. Since its incorporation in March 2005, Donal has played a key role in the development of Kedco into a leading company in the anaerobic digestion and gasification fields. He has spoken at length on these topics and their potential contribution to the economy recovery in the UK and Ireland. Prior to his involvement with Kedco, Donal was a divisional manager with SWS Farm Services Limited, an Irish company specialising in wind energy and business services. Donal graduated from University College Dublin in 1997 with a degree in Agricultural Science, he has a certificate in environmental sustainability from Delft University in the Netherlands and is presently finalising an “Executive Education Program in Leadership” at Stanford University in California.

## Gerry Madden Finance Director

Gerry Madden joined Kedco in May 2007 as the Finance Director. Prior to this, Gerry operated his own financial consultancy practice between 1998 and 2007 advising companies on merger and acquisition activities. Gerry is a fellow of the Institute of Chartered Accountants in Ireland having qualified as an accountant with KPMG in 1987. Gerry holds a Bachelor of Commerce from University College, Cork.



# Illustrative Project Funds Flow

- Kedco expects to develop and sell the commissioned plant to the respective project joint ventures at a circa 10-15% margin on construction cost (this margin is expected to approximate Kedco's JV equity contribution)
- This model and the effective "recycling" of equity reduces Kedco's net capital requirement for building out its project pipeline, a typical limitation on other business models
- Kedco's partners will enter long-term feedstock supply agreements thus eliminating a major source of risk from the business model. Kedco's partner receives payment for the feedstock and the lease of land, as well as a pro-rata share of JV profits
- Kedco expects to generate a triple revenue stream: a development fee on commissions, an ongoing monitoring fee and a share of profit from energy sales

