

Putting our energy into  
safe, predictable &  
sustainable solutions

**Capability & Experience**

# About Synergie



Synergie Environ is an energy engineering firm based in Glasgow, Scotland focused on cutting cost, consumption and carbon for our clients.



Synergie Environ was born out of desire to push forward the development of clean energy in Scotland and the UK and our vision is simple:

“To assist in the delivery of a zero-carbon future by providing innovative clean technology solutions to industry and businesses.”

The team operates over three core business lines: Anaerobic Digestion and Bioenergy, District Energy Networks, and Energy Efficiency and Strategy.



For each of our core businesses we provide engineering and project management services across the full project lifecycle, from feasibility to construction and commissioning.

# HSEQ

## Zero

Zero RIDDOR reportable incidents over a 13-year period.



We are proud of our HSE performance but recognise there is no room for complacency.

## SEQual

PD&MS is registered and certified in SEQual, Supplier ID 1504.



Regular HSEQ initiatives as part of our improvement plans.



Regularly audited by external parties associated with certification requirements.



Safety is our **number one** priority, and we will use our positive and embedded safety culture to ensure we continue to deliver top quartile safety performance.



Never get complacent. One of our values and our key commitment to safety and our safety culture.



We ensure that our site teams are actively involved in site-based safety intervention systems.

## Personal safety commitment

### BARRIER CONTROL

We will never cross barriers without permission

### HOUSEKEEPING

We will keep our work area clean, tidy and free from obstruction

**COMPETENCY**  
We will only start the job if we are competent and have the relevant authority

**INTERVENTION**  
We will intervene in any unsafe act, omission or hazardous condition



**ENVIRONMENTAL**  
We will comply with waste management arrangements on site



Part of, and implementing, RSK's Second Nature sustainability strategy – which is fully aligned with the United Nations Sustainable Development Goals. This focusses on environment, society, our people, our value chain, finance and governance.

## LRQA

PD&MS was recertified to the ISO group of standards following a renewal audit in January 2024.

## 11.5m+

11.5 million+ value adding onshore and offshore man-hours have been liquidated.



Top quartile industry performance over extended period.

## 13

Excellent safety performance. 13 years without a lost time safety related incident (LTI).

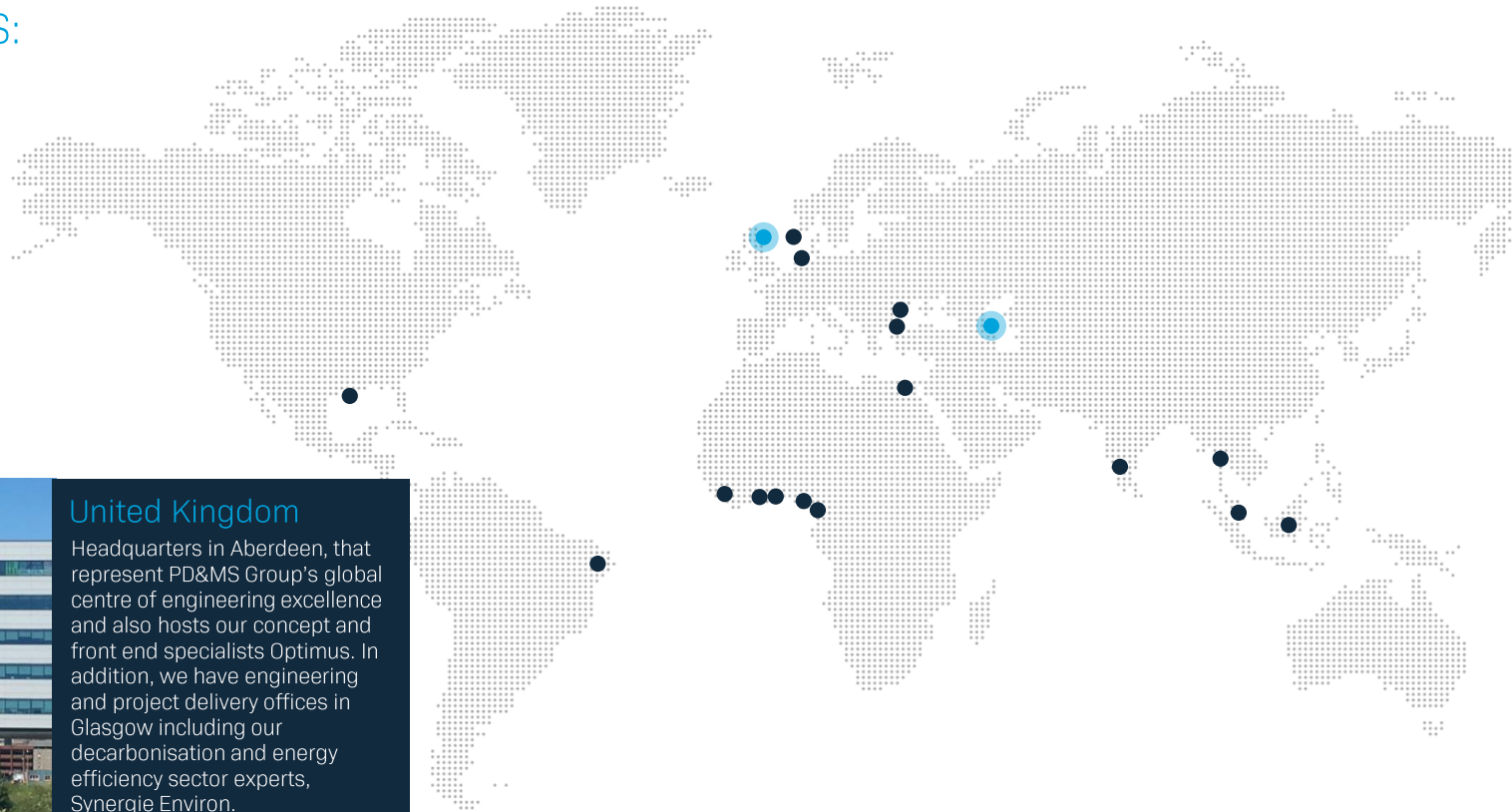


To improve safety, we hold a monthly HSE Forum call within PD&MS.

# Locations

## HEADQUARTERS: ABERDEEN

- Operational offices
- Working locations



























**United Kingdom**  
Headquarters in Aberdeen, that represent PD&MS Group's global centre of engineering excellence and also hosts our concept and front end specialists Optimus. In addition, we have engineering and project delivery offices in Glasgow including our decarbonisation and energy efficiency sector experts, Synergie Environ.



**Azerbaijan**  
Regional Office in Baku delivering Engineering, Procurement Construction and Commissioning services in Azerbaijan, Georgia and Turkey (AGT), Eastern Europe and the Middle East.

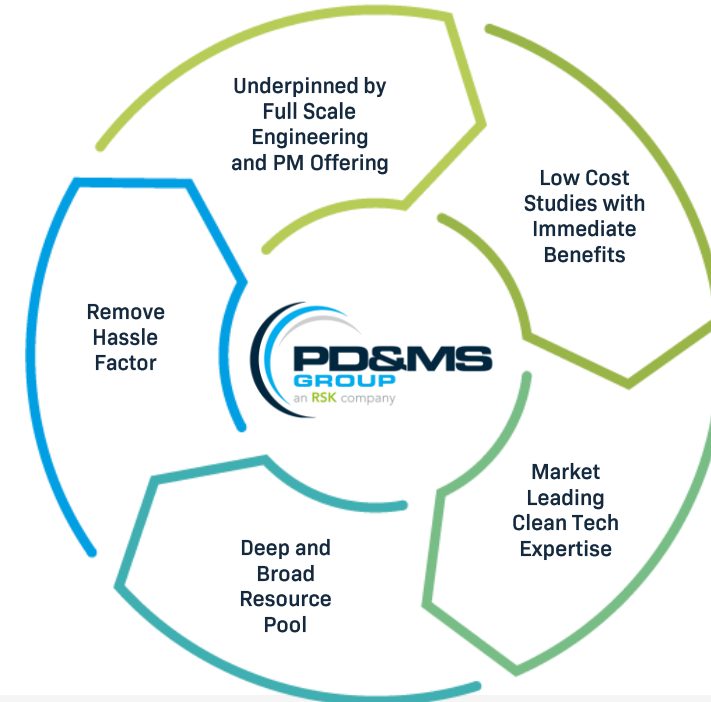
# Group Sector Partnerships

# Group Circular Economy

## AN INTEGRATED APPROACH

- Clear strategy and well defined understanding of our decarbonisation offering
- End to End management by PD&MS - reduces hassle factor for you
- Lean agile and easy to work with business
- Resources available to support you – Today
- Lower Cost than in-house or competitor resources
- Strong Track Record in Multi Industry Carbon Reduction and Management
- PD&MS and SEL have Multi industry experience bringing new perspectives and solutions
- Wide portfolio of late life assets to share learnings across clients
- Contractual Relationship already in place



**Scope 1** emissions to be reduced by 100% (based on current operations) by 2026  
All Direct Emissions from the activities of an organisation or under their control.



**Scope 2** emissions reduced by 100% (based on current operations) by 2026  
Indirect Emissions from electricity purchased and used by the organisation.



**Scope 3** emissions reduced by 50% (based on current operations) by 2040  
All Other Indirect Emissions from activities of the organisation, occurring from sources that they do not own or control.

# Energy Efficiency

## Our Track Record

- Synergie have been involved in energy efficiency projects for a range of public and private sector clients over the last decade and have saved over 1 MTCO<sub>2</sub>e.
- We specialise in energy efficiency and strategy development in industrial and commercial facilities, across a wide variety of sectors, bringing the best practices for a large range of sectors to benefit our clients.
- Team of decarbonisation specialists including Chartered Engineers, with a blend of Clean Energy and Oil & Gas experience, giving the diversity of thought needed and a cross-industry perspective.

## Services We Provide

- Scope 1, 2 and 3 reporting, including ESOS.
- Qualifying and evaluating supply chains.
- Assistance with grant funding.
- Baselining of carbon emissions required for ESOS, SECR.
- Preliminary design / FEED Design.
- Project management.
- CDM principal designer / contractor.
- We use our proven CMRP tool.



- |   |  |  |   |  |
|---|--|--|---|--|
| <ul style="list-style-type: none"> <li>– Secure resources</li> <li>– Identify information sources</li> <li>– Create a 'local' plan</li> </ul> | <ul style="list-style-type: none"> <li>– Set scope</li> <li>– Calculate emissions baseline</li> <li>– Prepare emissions forecast</li> <li>– Document vision and record target</li> </ul> | <ul style="list-style-type: none"> <li>– What emissions reduction opportunities do we have?</li> <li>– How do we prioritise them?</li> <li>– What's worked elsewhere?</li> </ul> | <ul style="list-style-type: none"> <li>– What's our forward strategy?</li> <li>– What actions do we commit to?</li> <li>– How do we embed carbon management?</li> </ul> | <ul style="list-style-type: none"> <li>– Make the plan work</li> <li>– Keep it fresh</li> <li>– Capture the benefits</li> <li>– Undertake annual review and plan update</li> </ul> |
|---|--|--|---|--|

# District Heating

## Our Track Record

- Synergie have been involved in concept development of over 20 district energy networks for a range of public and private sector clients over the last decade.
- We specialise in the early stages of district energy projects, up to and including the production of investment grade businesses cases and pre-FEED design.
- Our expert engineers are certified to the latest CIBSE Code of Practice (CP1: Heat Networks) and have experience of funding through RHI and LCITP (now HNF), including successful past applications.

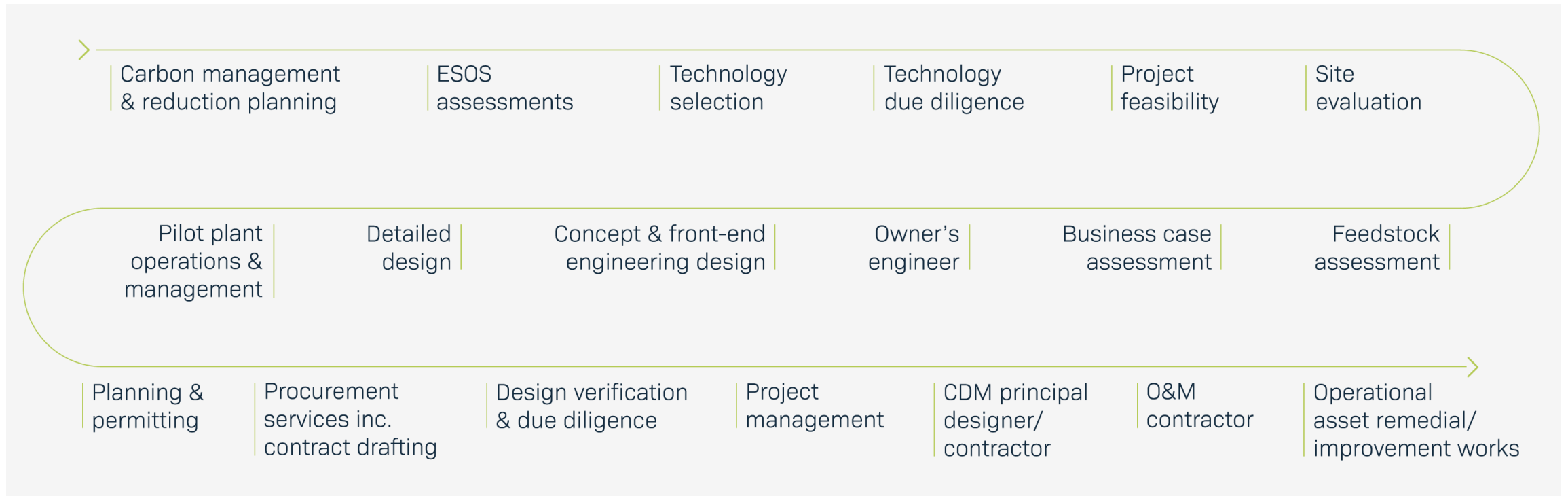
## Services We Provide

- Project identification and feasibility.
- Investment grade business case to CP1.
- Assistance with grant funding applications.
- Preliminary design / FEED Design.
- Design verification and due diligence.
- Project management.
- CDM principal designer / contractor.



# Engineering Services

We provide a complete package of engineering, procurement, construction & management (EPCM) services for low-carbon energy projects, including:





| Our  
| Experience

Capability & Experience

# Sectors

Synergie Environ have worked on low-carbon energy projects across the following sectors:



Pharmaceuticals



Energy generation  
(inc. gas-to-grid)



Waste management  
& recycling



District energy networks



Distilleries & breweries



Tourism & leisure



Agriculture



Petrochemical



Academia & research



Transport & haulage



Water & wastewater treatment



Local authorities

# Sector Partnerships



RPS Scot Ltd



Comhairle nan Eilean Siar



# Case Study

## STERLING PHARMA SOLUTIONS

Anaerobic Digestion

LOCATION: England

VALUE: £8.5M

### HIGHLIGHTS:

- > 40GWh of biomethane per annum;
- > 6,600 tonnes of CO<sub>2</sub>e removed from emissions;
- c.£400k saved per annum in disposal costs;
- Provides energy security for a large energy user.

### SCOPE:

First AD plant in Europe for processing of high-strength solvents, glycols and alcohol by-products from pharmacological manufacturing to produce biomethane.

### Responsibilities included:

- EPCM contractor;
- Development & operation of pilot plant;
- Procurement of all work packages;
- CDM Principal Contractor & Principal Designer;
- Client Project Manager
- Planning & permitting.



# Case Study

## INVER HOUSE DISTILLERS

Anaerobic Digestion

LOCATION: Balmenach Distillery

VALUE: £2.8M

### HIGHLIGHTS:

- Revenue generation through FIT and RHI;
- >£100k savings on electricity costs per year;
- >£600k savings on waste disposal costs per year.

### SCOPE:

Led the development of an AD project for a distillery client to process whisky co-products and produce heat and power for the site.

### Responsibilities included:

- Feasibility studies;
- Front-end engineering design;
- Contractor/supplier procurement;
- Contract drafting;
- Commissioning.



# Case Study

## FIRST MILK CHEESE

Anaerobic Digestion

LOCATION: Aspatria, Cumbria

VALUE: £12M

### HIGHLIGHTS:

- 7,000t CO<sub>2</sub>e removed from emissions per annum;
- Replacement of 40GWh equivalent of fossil fuels per annum;
- On-site power consumption reduced by 25%;
- Waste movements off-site reduced by c.3,000 vehicle movements per annum.

### SCOPE:

Delivery of an AD facility to generate biomethane from milk production waste (whey) for subsequent injection to the national gas grid.

### Responsibilities included:

- Client engineer;
- Project manager;
- Front-end engineering design;
- Commissioning.



# Case Study

## RPS SCOT

Pyrolysis

LOCATION: Central Scotland

VALUE: £1.2M

### HIGHLIGHTS:

- Self-sufficient process through syngas-derived power & heat;
- Pyrolysis by-products can be recycled into new materials, including steel and carbon black pigment.

### SCOPE:

Pyrolysis treatment facility for waste tyres, producing syngas to fuel the process as well as recovered metals, oils and fibres for recycling.

### Responsibilities included:

- Principal contractor;
- Principal designer;
- Client engineer;
- Project manager.



# Case Study

## STANDARD GAS

Energy-From-Waste

LOCATION: England

VALUE: £5.5M

### HIGHLIGHTS:

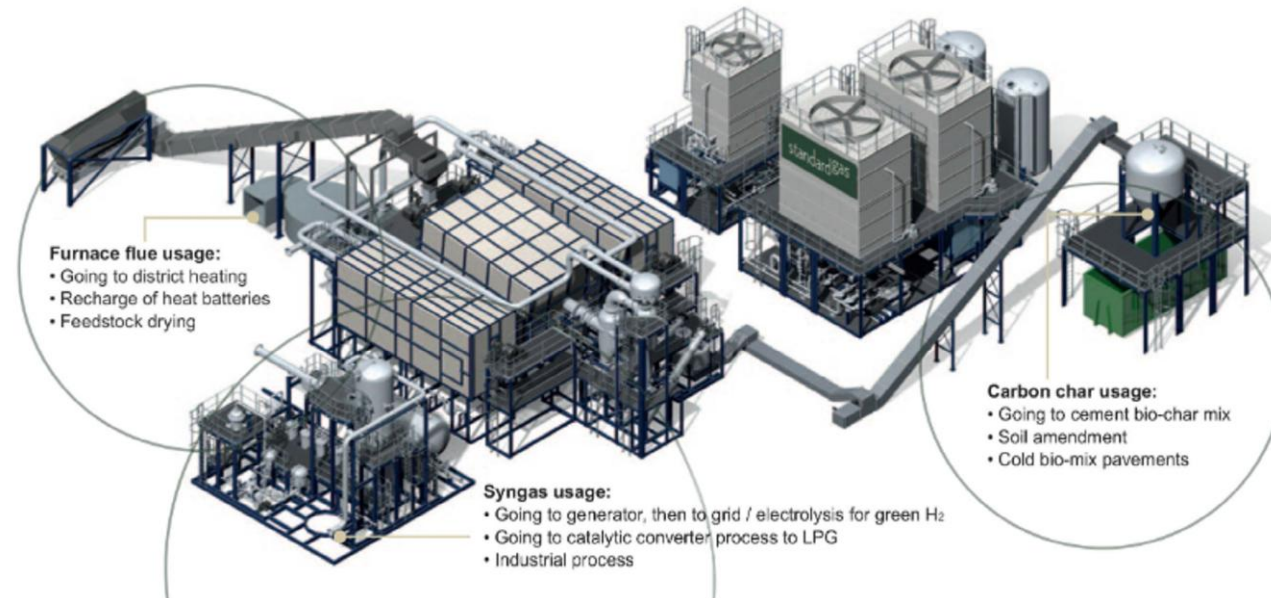
- Low-carbon alternative to landfill disposal for non-recyclable wastes;
- Syngas can be utilised for electricity generation, H<sub>2</sub> production via electrolysis or conversion to LPG;
- Heat directed to district heating networks or heat batteries;
- Residual char used in low-carbon construction materials.

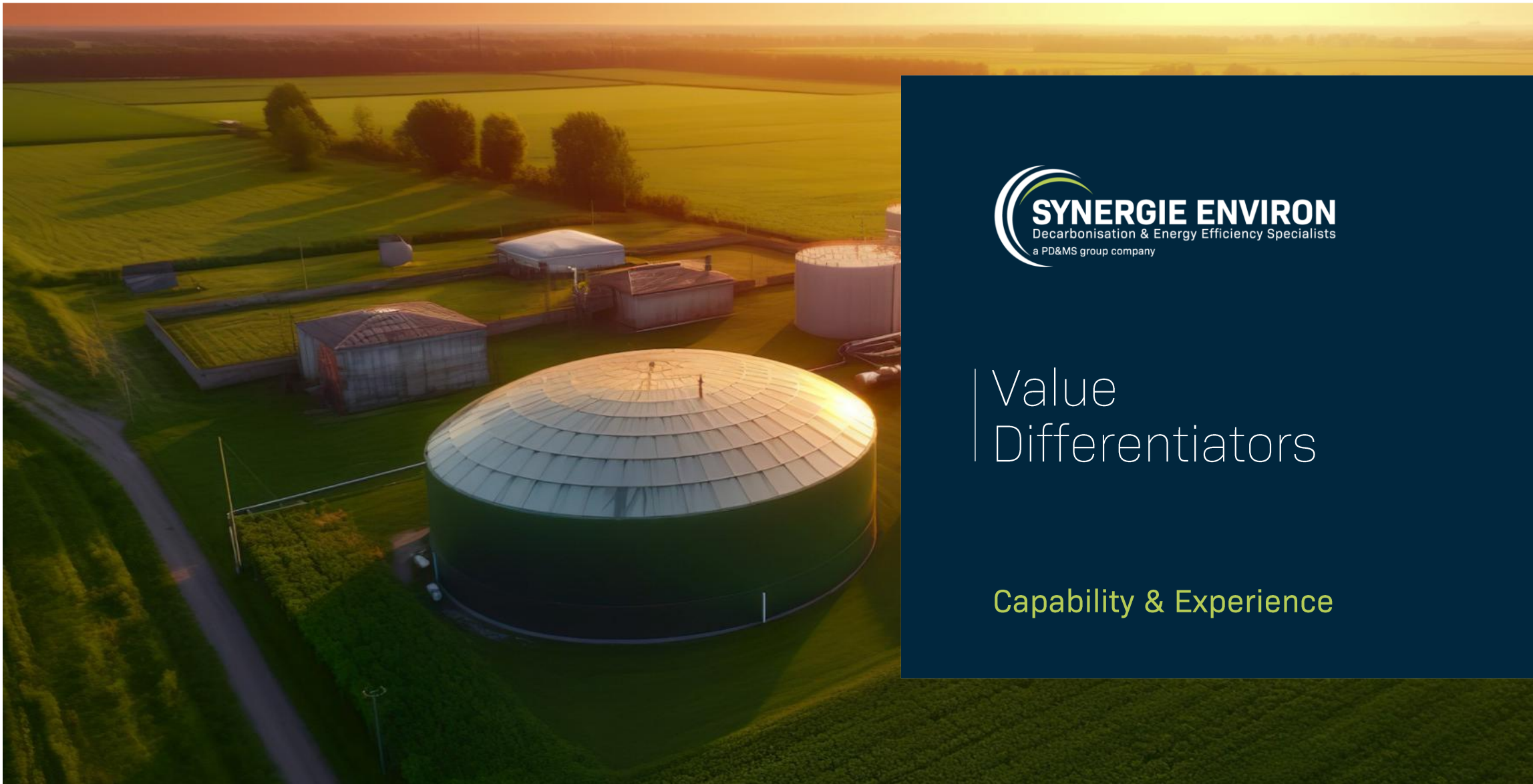
### SCOPE:

Pyrolysis system designed to produce syngas from biogenic and residual wastes. The syngas is then utilised for the generation of electricity, electrolysed to produce hydrogen fuel or sent to a catalytic conversion process to synthesise LPG.

### Responsibilities included:

- Principal designer (CDM);
- Detailed design review (inc. HAZOP);
- Principal contractor (CDM);
- Procurement & installation of BOP items.





Value  
Differentiators

Capability & Experience

# Why PD&MS: Quick Facts

## PROVEN

A track record of delivering market-leading, scalable and cost-effective solutions since 2002

### PROVEN CAPABILITY



in Brownfield, Greenfield, Drilling, Decom, Renewables & Carbon Transition

650 onshore engineering and support personnel

# 650

We are passionate about our business, clients and industry

### PASSION

Our energy makes things happen



### DELIVERY

In-house, end-to-end capability and flexible systems to deliver right-sized solutions

### RESULTS

Empowering individuals and teams to deliver exceptional results



### NO RED TAPE

We will never be constrained by cumbersome processes and procedures



### MANAGEMENT SYSTEM CERTIFIED

to ISO 14001 and ISO 45001, ISO 9001, ISO TS 29001, PED Module

Pro-actively supporting **NET ZERO**



### PD&MS GENES

...it's in our DNA

Real and measurable company values ingrained and embraced throughout our workforce

### SAFER YOU = SAFER ME



Inherent safety culture throughout the company with

### CORE TO OUR SUCCESS IS OUR PEOPLE



We consistently step up and go the extra mile



Acquired Synergie Environ and Optimus - adding to decarbonisation, clean tech and engineering expertise

### AGILITY



### HANDS-ON MANAGEMENT

Hands-on, fully engaged directors and senior management

### TRUSTED PARTNER



We listen, understand



Tier 1 assurance at Tier 2 cost



# CMRP

PD&MS Group will develop a Carbon Management & Reduction Planning (CMRP) specific to your business which will develop an emissions baseline and identify, appraise and produce recommendations which will reduce energy costs and carbon emissions from your operations.

A **CMRP** is an approach to developing a road map for an organisation to reduce its carbon emissions in a structured, monitored and measured manner.

This is an approach that we have utilised across a very wide range of sectors and over many years and as such have built up extensive knowledge and expertise in reviewing business operations and identifying opportunities to reduce carbon.

This approach can be seen detailed in the infographic.



# Why PD&MS: Quick Facts

## ENGINEERING CHANGE

Building safe and sustainable solutions that **make the energy transition happen**

Our **Sustainable Sourcing Policy** is at the heart of our procurement activities

Outstanding **safety performance** > 11.5 millionman hours LTI free



Over 50 onshore engineering and support personal with **renewable experience**

1000+ multi-skilled **construction personnel pool**

# Thank you for your time

We welcome any questions



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