

POWERHOUSE ENERGY GROUP

2019 AGM
Operational Update

David Ryan CEO
14th August 2019

Chairman's Statement

"We have announced our first build for a commercial DMG® plant at the Protos Energy Park and the first stage of the engineering work has been completed allowing public and council consultation on behalf of our customers to facilitate planning submission.

We have engaged with the engineering and contracting community and we have a number of quality assured delivery contractors for the stream of projects, including delivery options for international orders. Now with the active engagement of Peel, we anticipate taking this project to financial close as part of a funding arrangement for the eleven potential projects.

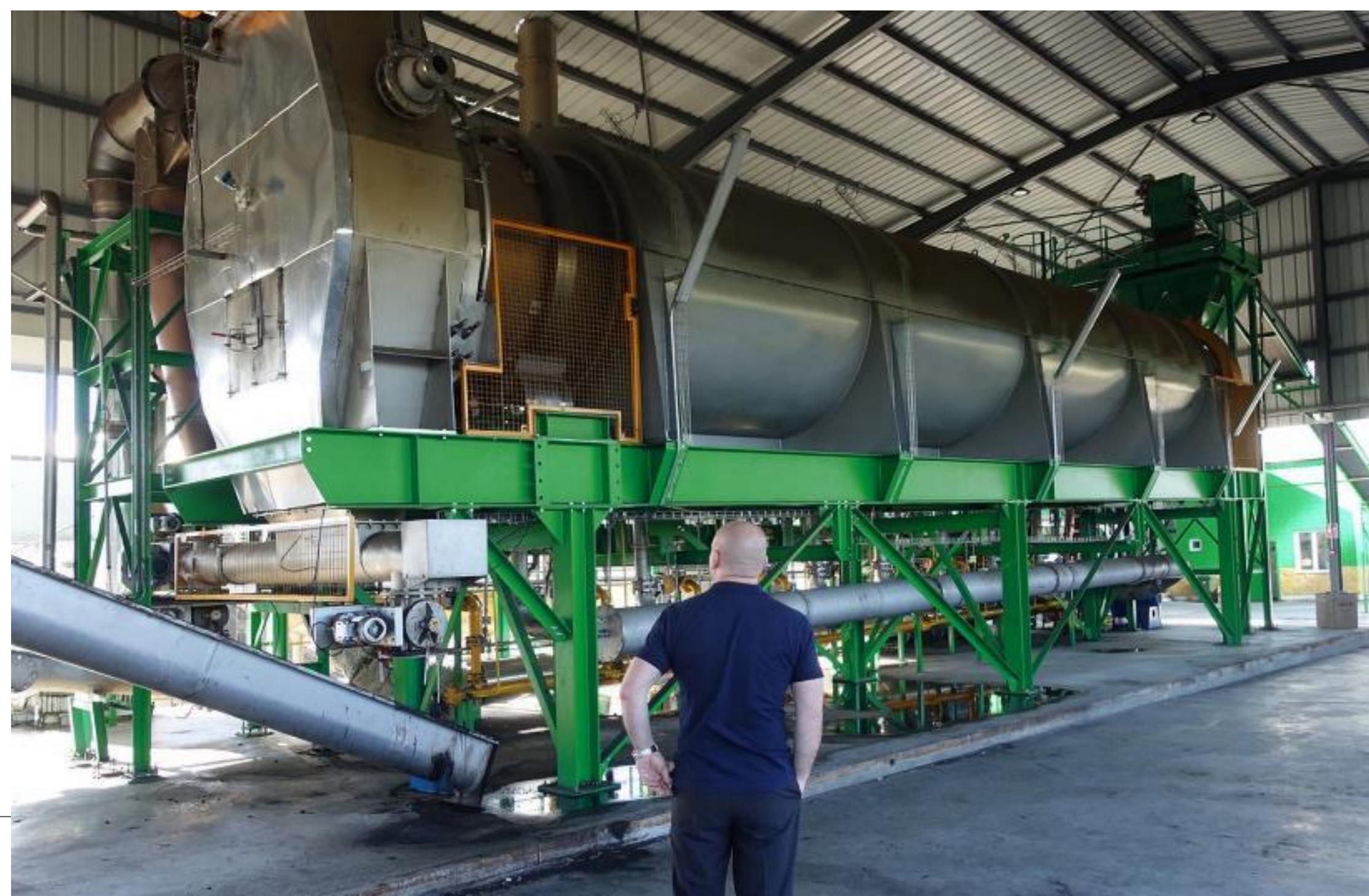
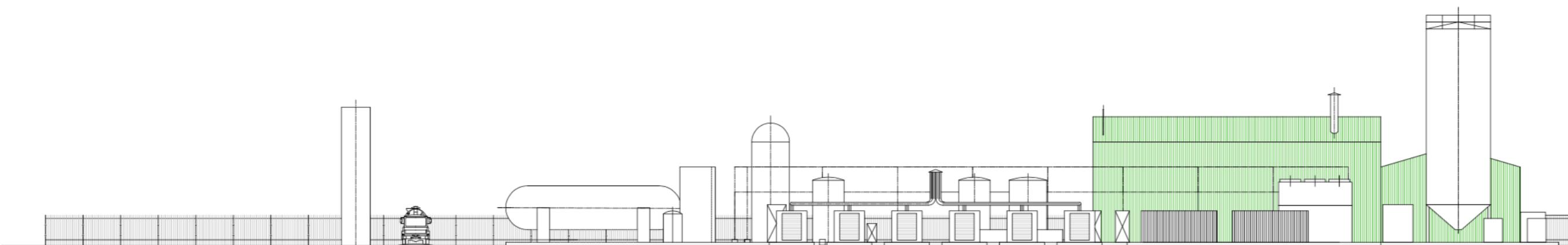
During this year we have streamlined our business focussing on the delivery of the first plant and in line with this we have secured first revenues and are now looking to receive trialling revenues from the equipment at the Energy Centre at University of Chester.

The consultancy, installation, operation and plant licensing revenues that these projects will deliver are the foundation of the company business and the Board is confident that the commencement of our paid activities and the ever growing level of commercial engagements, augmented now by Peel will provide the necessary platform to establish PHE as a sustainable and profitable business with a strong market presence in the hydrogen economy.

Immediately following this announcement my colleague David Ryan, CEO of PowerHouse Energy Group, will give a strategic and operational update, the full supporting presentation of which is available on our website."

Our Product

- DMG® offers potential reduced waste sorting and cleaning costs vs other EfW processes
- Equipment is proven in service with operating parameters for hydrogen or power
- Capacity now up to 50 tonnes daily destruction
- Net zero CO2 emission in power and negative CO2 emission in hydrogen generation
- The Calorific Value (CV) range of feedstock is less significant to DMG® operation and efficiency than to other EfW processes
- DMG® Technology is a step on the roadmap to a hydrogen economy



dmg
WASTE PLASTIC
REGENERATION

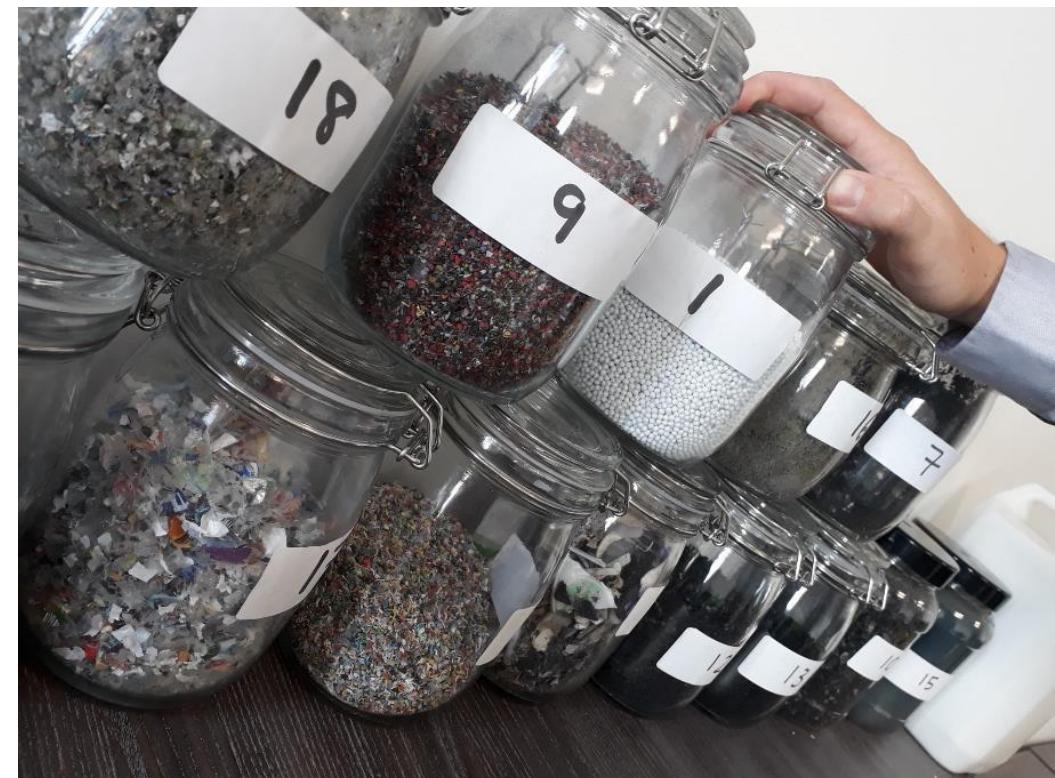
Our Progress Highlights

- First build secured and the planning and permitting stage successfully completed
- Peel relationship enhanced through new collaboration contract
- Funding engagement for pipeline of projects well under way with institutions and entities. This will be augmented through engagement of Peel
- Pipeline of 24 screened DMG plant opportunities – now augmented by Peel additions
- Rigour applied to pipeline of opportunities with payment for outline engineering, site assessment and feedstock testing work undertaken
- Costs brought under tight control – focussed on immediate challenges and commercialisation
- Secured first engineering revenues
- Targeting testing, lab services and consulting engagement with a view to operational side being cash positive



Operational Update

- Risk Management programme ongoing
 - Technology Risk Management Programme in hand and will be validated through DNV-GL
 - Risk management informed through our consulting work effected in Spain
- Lab scale unit is operational and with G3 Demonstrator ready for paid trials with broader feedstocks from customers
 - Consulting with Spanish and Argentinian customers
 - Quoting paid testing and modelling opportunities in other feedstocks
- Intellectual Property protection programme continuing
 - Family of patent work completed and statements of invention and claims initiated and under scrutiny
 - The chemical engineering modelling and control functionality maintained as secret and control expertise being applied to this for execution



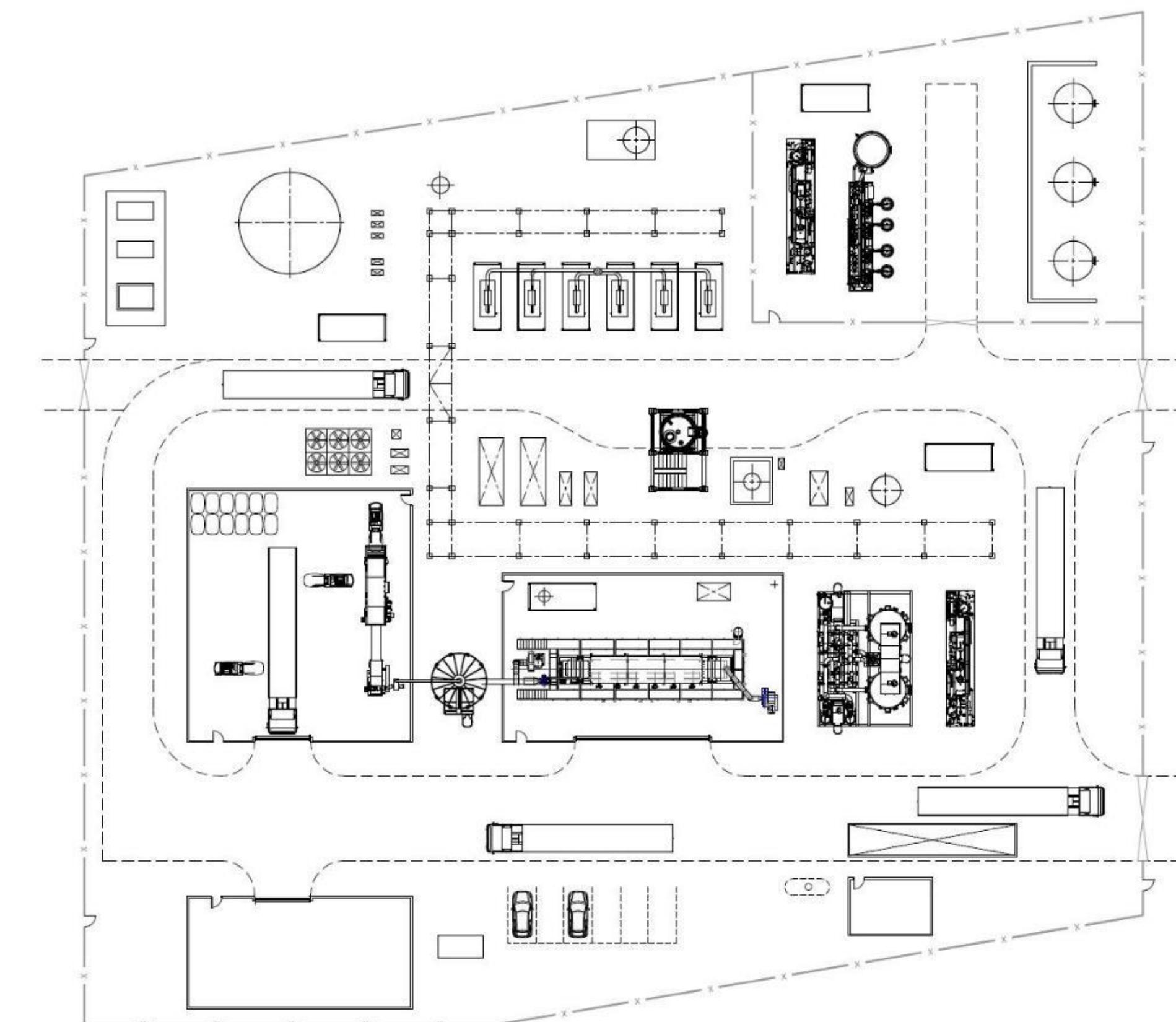
Peel Collaboration Contract

- Peel are a primary industrial landowner, with extensive landbank throughout the UK
- They are an established experienced developer and bring the necessary relationships with blue-chips, financiers and councils
- Peel have undertaken significant engagement and due diligence
- Model of delivery when all partners involved is land and project risk through Peel and W2T, PHE contracted for pre-project, engineering, process delivery and operational licensing
- Most importantly Peel bring a suite of around 15 other sites, some with counterparties in terms of waste feedstock, power and most importantly hydrogen demand
- The agreement does not preclude customers buying the process.
- Peel will make an initial investment commitment for the first project but is likely to be significantly more as we move through development of at least 11 sites.



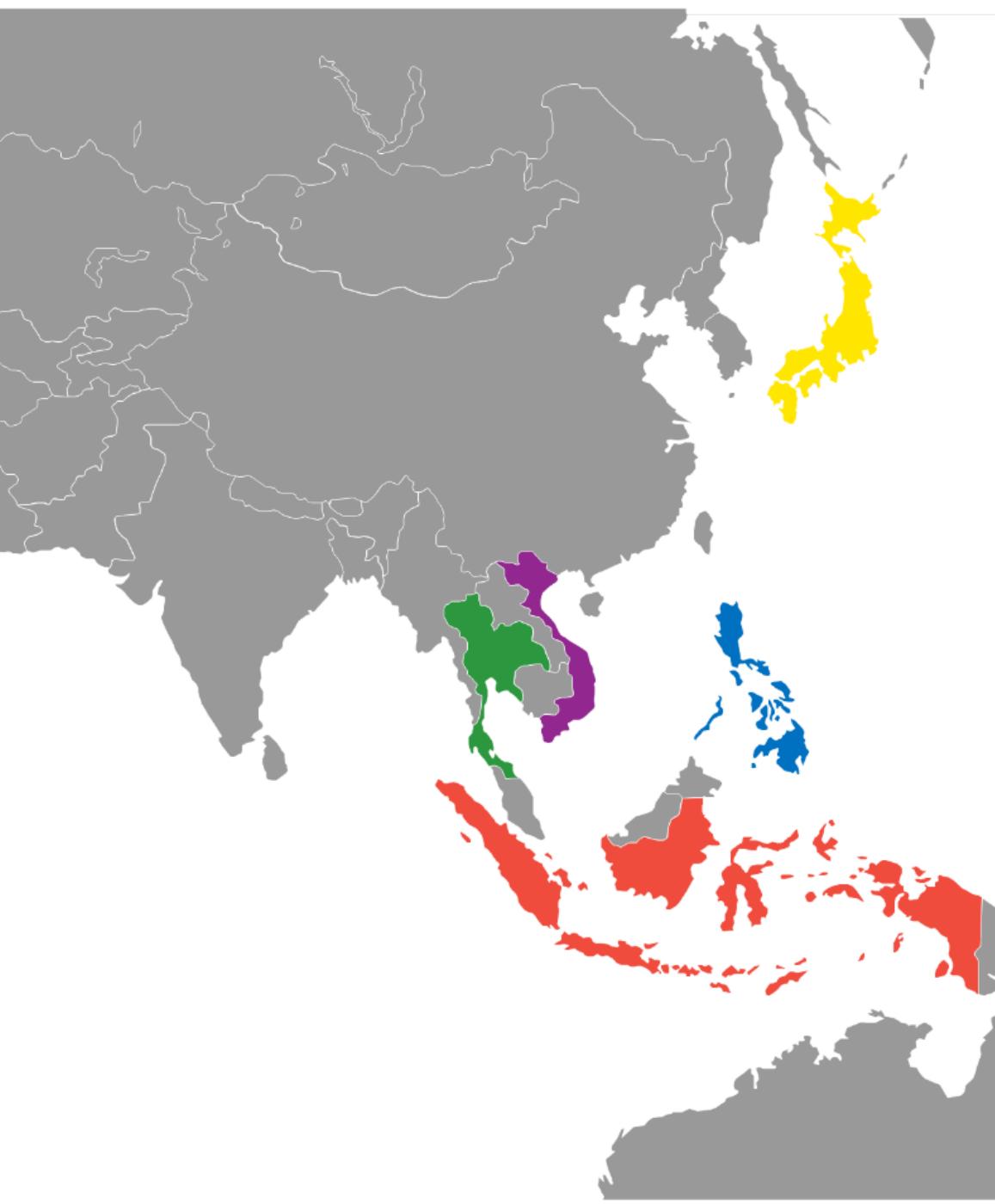
First Commercial Application

- Peel and W2T have power and waste agreements in place and now Peel are leading engagement with H2 offtakers
- Initial engineering consultation for Protos site completed around agreed feedstock and designs aligned to plastic partners on site
- Noise and Emissions modelling all well within limits
- Changes to layout to allow direct access of feedstocks from neighbouring plastic recyclers
- Consultations with community and councils completed – all positive and planning submission to be made
- Pre-Qualified 5 potential contractors to undertake FEED & Execution – this is for the pipeline of projects and allows action on multiple sites
- Protos is still likely first site but, with second and other projects progressing well, we intend to take these ready to closure in parallel with the Protos site
- Funding process and related due diligence is progressing well with institutions through EY, with W2T and now Peel



Customer Engagement Outlook

- Roll out for UK in line with plans and delivering strategy, the consortia agreement ensures that sufficient weight and rigour is brought to screening of projects of interest in UK
- Major industrial complexes are interested in the opportunity of providing the energy to their sites with nett zero CO2 emissions
- Interest from councils in engagement and this will mature into paid technical studies phase
- Partner engagement model will be critical to international market success. Near term focus beyond UK is on Spain, Japan and Korea and other parts of Asia



Summary

- Strategy is focussed on commercialisation and revenue generation
- Technology at an exciting stage as we progress to financial close on first secured commercial DMG facility in UK – our primary activity
- Stable financial position, now with revenue generation from initiation of project work, trialling, through project to licensing
- Significant partnership with Peel for UK roll out to 10 more sites in addition to existing pipeline of 24 DMG plant opportunities
- Licensing and partnership models will enable managed rapid roll-out of DMG® to meet growing demand in UK and internationally
- PHE has sound business model with multiple revenue streams which combined with the continued growth of commercial engagements provide the platform to establish the Company as a sustainable and profitable business



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