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Production of liquid fuels through pyrolysis conversion of low-grade plastic-rich wastes

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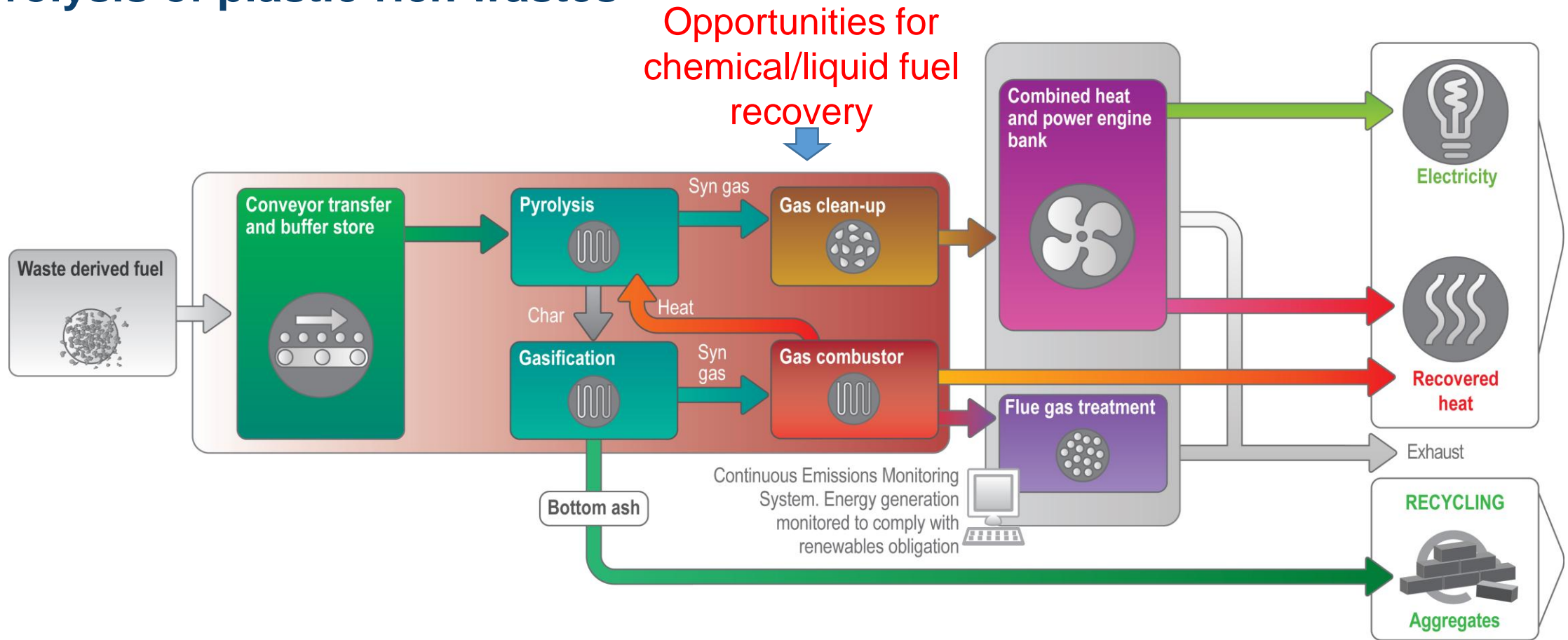
Project overview

Building on from a successful Energy Catalyst Round 3 project

- Develop in-depth chemical understanding of pyrolysis oil formation, yield and composition;
- Assess market potential for producing high quality chemicals and liquid fuels from a currently hazardous by-product
- Opportunity to produce low-carbon transport fuels for use in UK vehicles and in Nigeria back-up generators



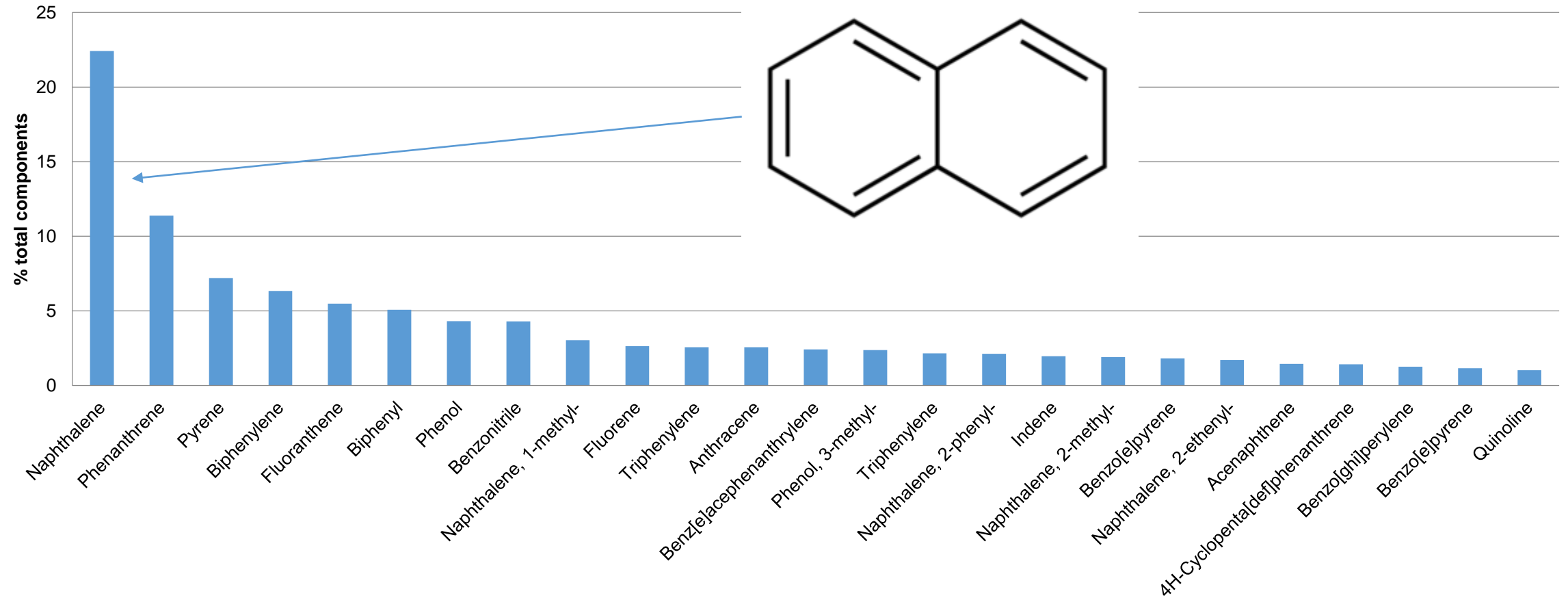
Pyrolysis of plastic-rich wastes



Demonstration pyrolysis plant



Oil analysis



Next steps

Significant opportunities in pyrolysis oil upgrading

- Fractionation and hydrogenation to be tested at pilot scale
- UK commercial opportunities in the production of low-carbon transport fuels in response to changes to Renewable Transport Fuel Obligation [RTFO]
- Deployment of energy from waste technologies at scale in Nigeria, working towards more sustainable waste management solutions and local-scale fuel production



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