

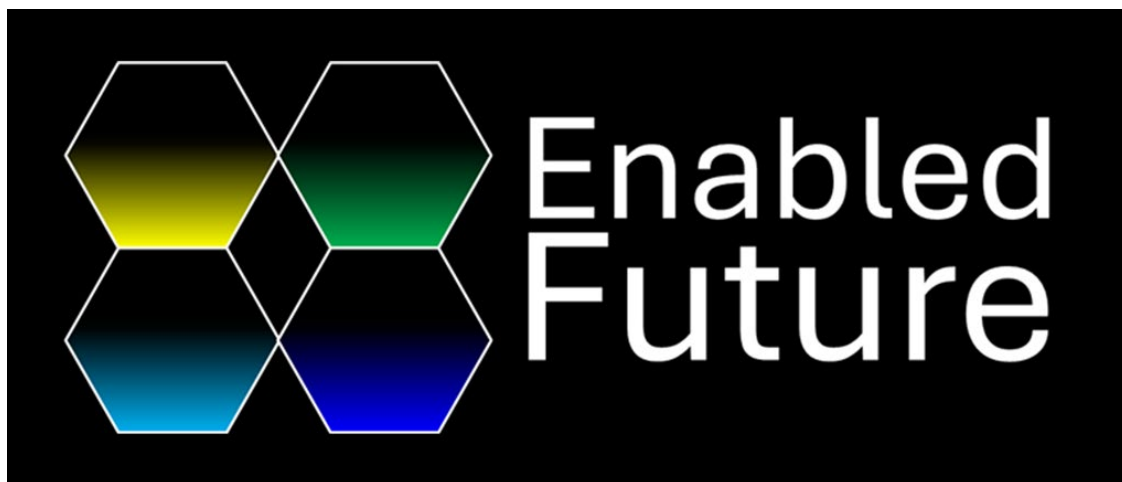


Optimising Technology Portfolios for a Sustainable Future

The (West Midlands) Battery Ecosystem

Dr Michelle Lynch, CEO, EnabledFuture

Contents



About EnabledFuture

Systems Thinking In Sustainability

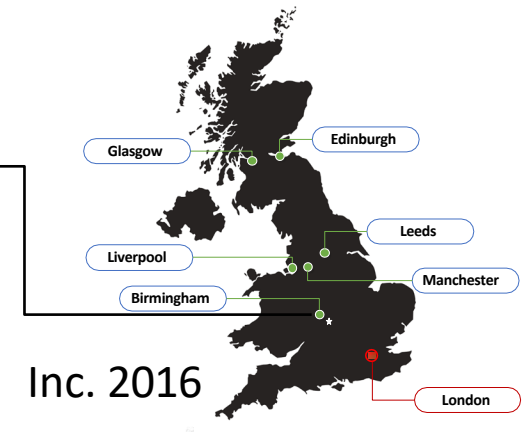
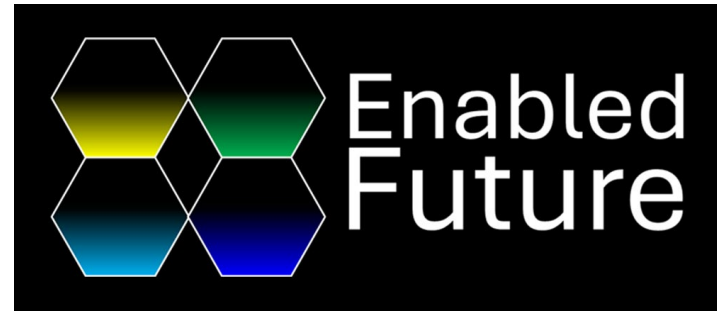
The Battery EcoSystem

The Role of Organic Chemistry

The West Midlands Battery EcoSystem

Key Takeaways

About EnabledFuture



EnabledFuture Limited (**EnabledFuture**), incorporated in 2016 is committed to **Optimizing Technology Portfolios for a Sustainable Future.**

The company provides expert consultancy and actionable insights in the fields of green chemistry, catalysis, batteries, hydrogen, valuable metals and the circular economy.

Through provision of bespoke reports, subscription services, training and industry events we offer a flexible range of solution for a broad client base along the supply chains of our market sectors.

Key Clients



Meet the Team



Dr Michelle Lynch, CChem FRSC
CEO, EnabledFuture

The EnabledFuture team combines a unique blend of deep technical expertise, strategic foresight, and hands-on industry experience, making them a powerhouse in driving sustainable innovations all the way to world scale plants.

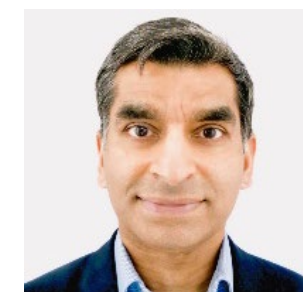
With decades of collective experience across chemicals, catalysis, battery materials, and circular economy, our team is uniquely positioned to deliver on the company's vision with the depth and quality required by our discerning client base.



Dr Dhivya Egambaram,
Intern (Battery Materials), EnabledFuture

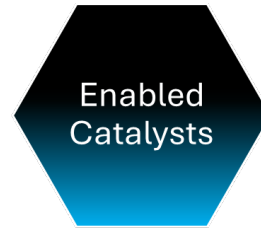


Dr Rob Parry
Non-Executive Director

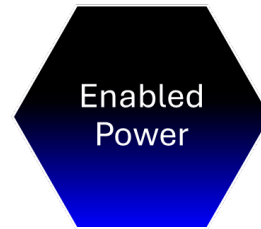


Dr Satheesh K Pillai
Global Partner

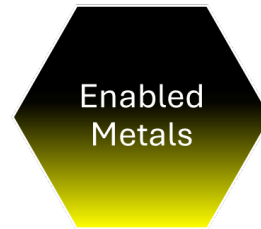
EnabledFuture Market Verticals



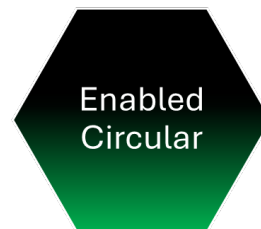
Catalyst technology for circular lifecycles of chemical building blocks, specialty & fine chemicals, energy carriers & biorenewables



Enabling technologies for clean power value chains including rechargeable batteries, fuel cells, electrolysers & solar photovoltaics



Sustainable technologies for circularity in high value platinum group metals (PGM), battery metals & other critical energy metals ⁶



Circular Economy focus for production of polymers, plastics, rubbers, fibres from renewable feedstocks and waste fractions

EnabledFuture Products & Services



Consulting Services: Empower your business to make sustainability achievable with our expert consulting services, offering strategic insights in technology deep dives, supply chain analysis, techno-economic evaluation, intellectual property analysis, lead generation and competitor benchmarking.



Multi-Client Reports: Access comprehensive multi-client reports that provide in-depth analysis and strategic foresight on critical markets, including PGM catalysts and petrochemical technologies.



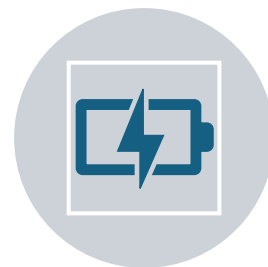
Training Programs: Enhance your team's capabilities with our specialized training programs in emerging technologies including petrochemicals, renewables, catalysts, hydrogen, sustainable aviation fuels, and the world of rechargeable batteries.



Industry Tracking: Stay ahead with our industry tracking services, offering real-time insights on battery materials, recycling of batteries, fuel cells and solar PV, or custom industries on request.



Thought Leadership: Lead your industry with cutting-edge knowledge from our thought leadership content, covering batteries, catalysts, green chemistry, CO2 utilization, metal circularity and other custom topics on request.



Industry Events: Join us for our conference & expo events in the battery, energy storage and advanced materials and engineering sectors. Our speaker lineups including prestigious industry leaders and academic experts. Exhibition spots are available at highly competitive prices!

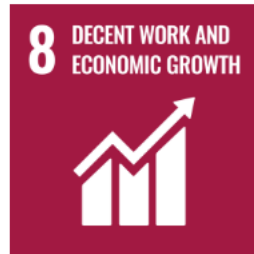
Interrelationships rather than things...

The whole not just each part...

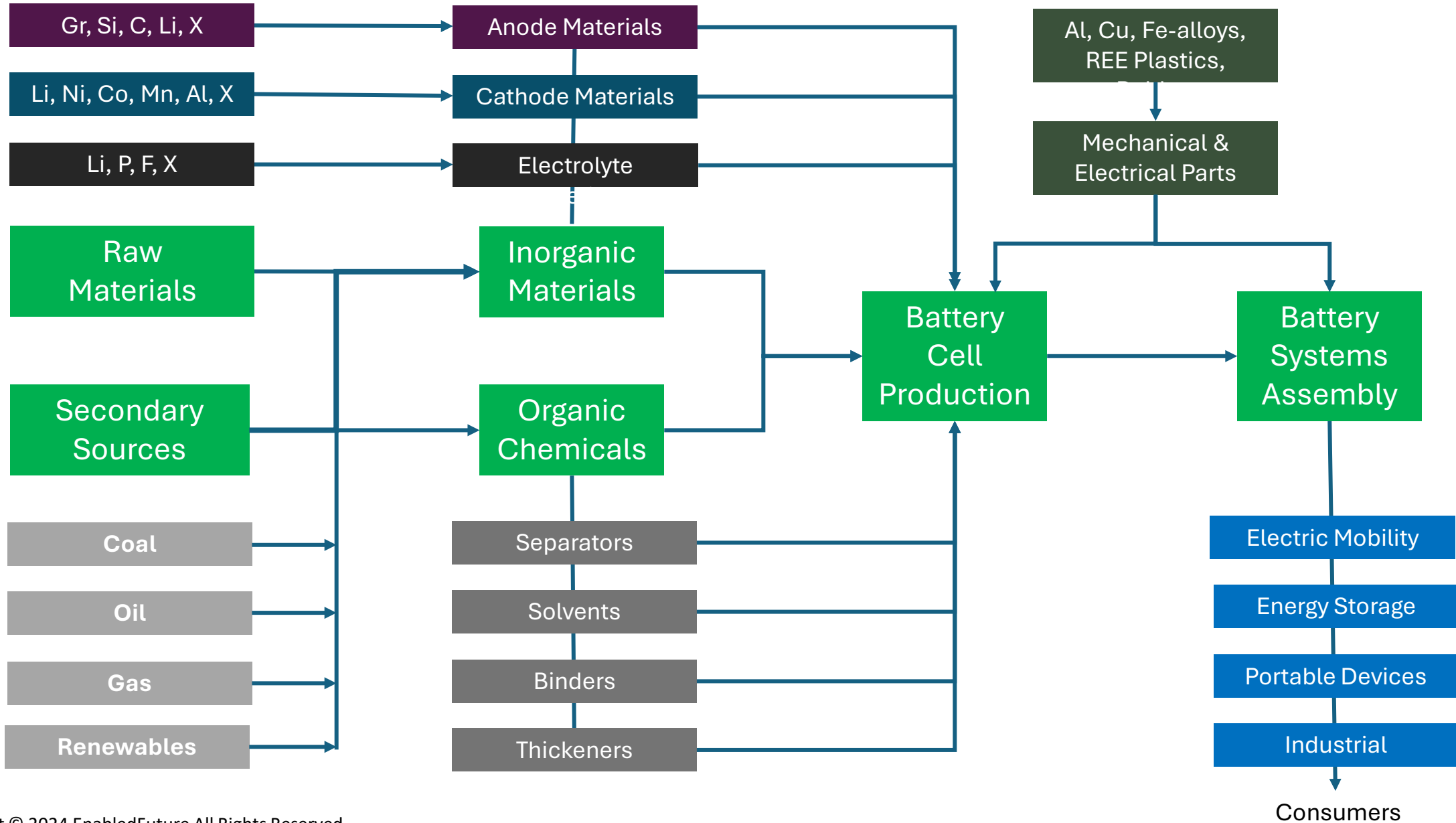
Patterns and timelines, not snapshots...

Zoom in, zoom out – “ZIZO”!!

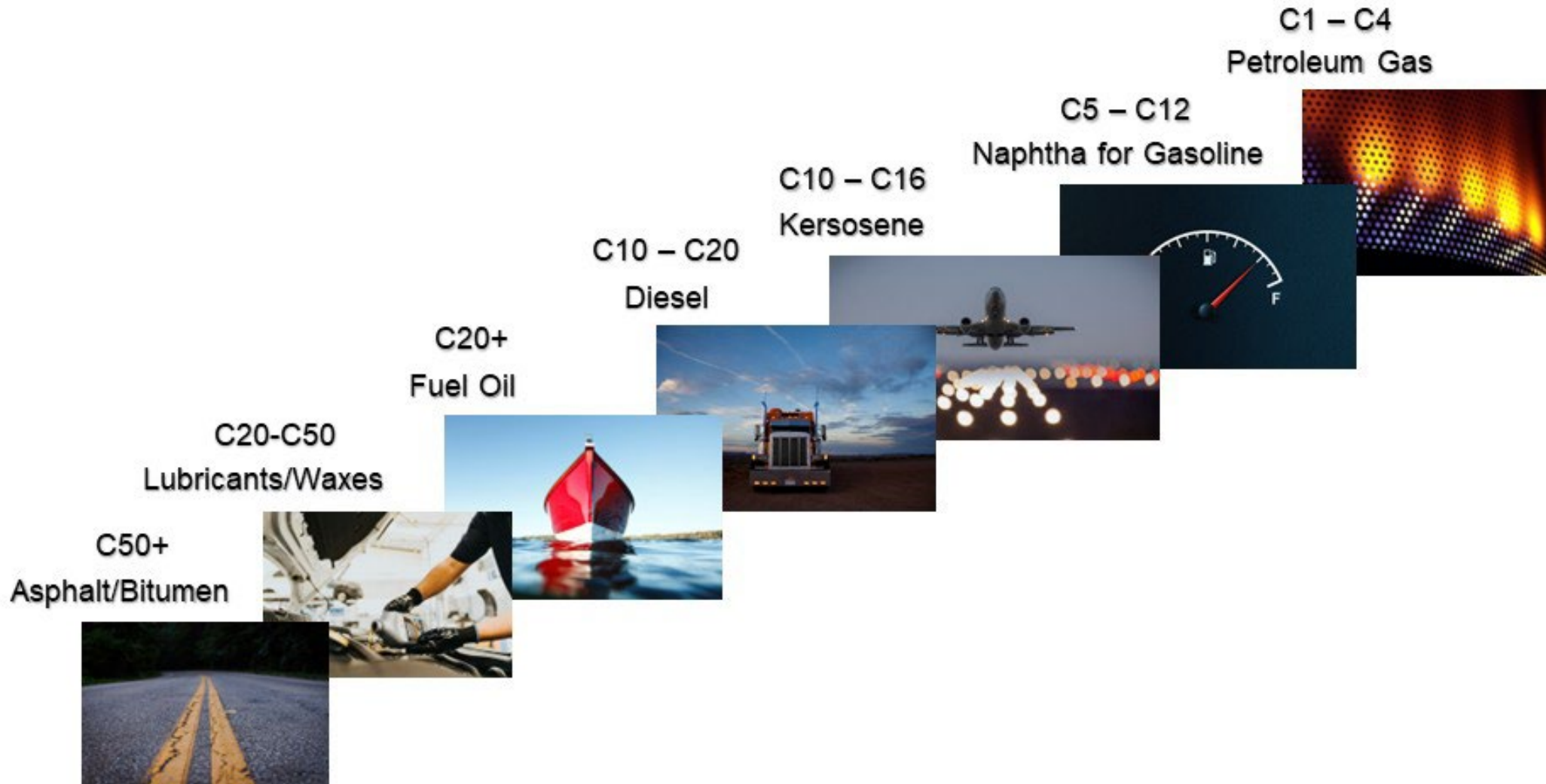
SUSTAINABLE DEVELOPMENT GOALS



The Battery EcoSystem (Simplified!)



Where does organic chemistry happen?

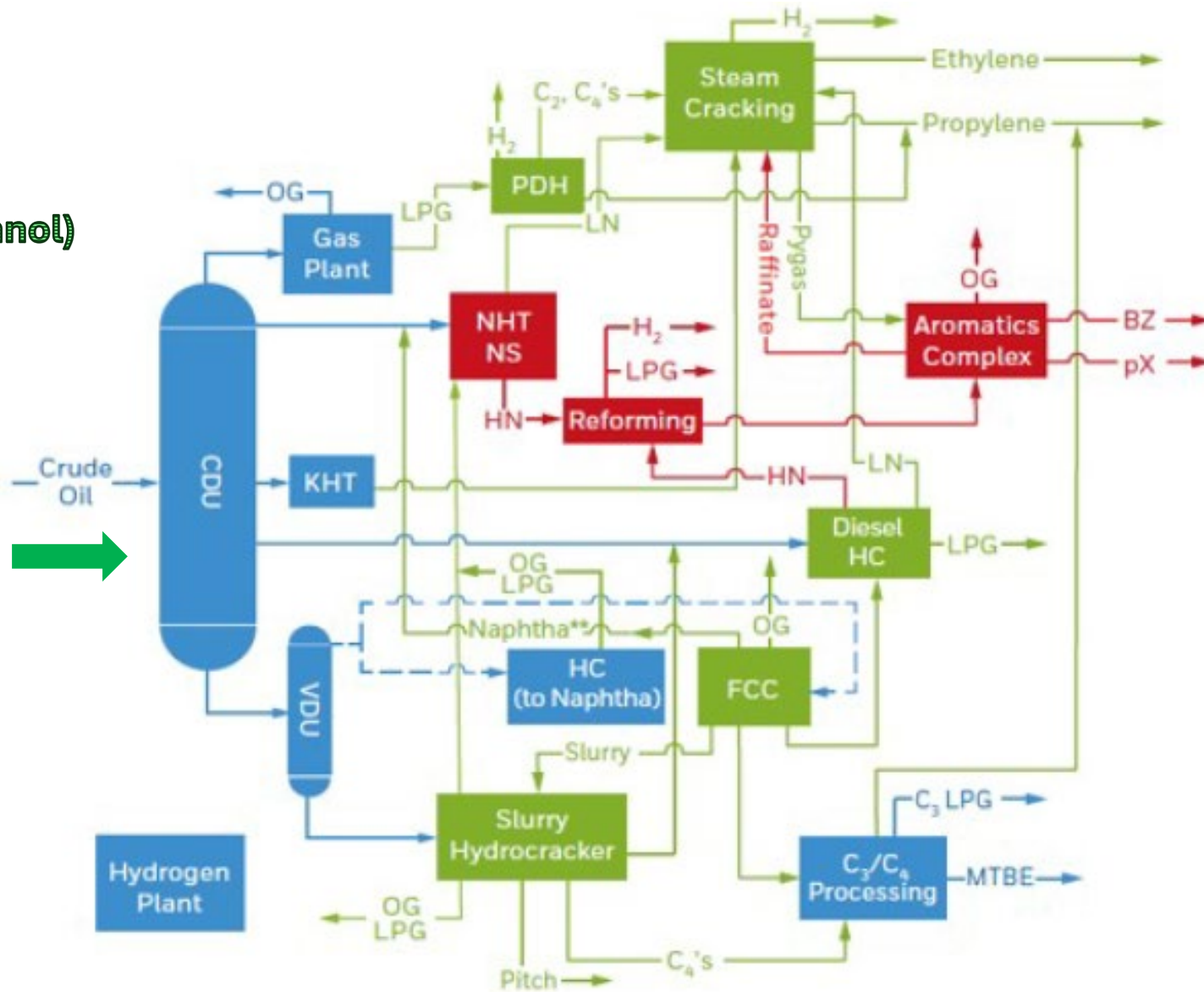


Where does organic chemistry happen?

CO, CO₂, H₂ (or Methanol)

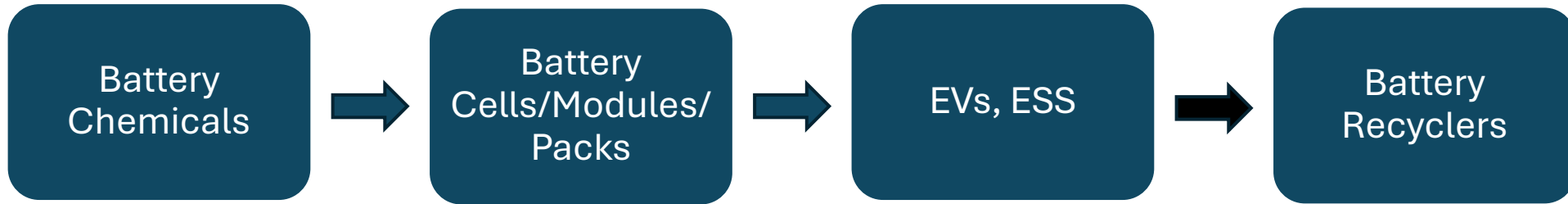
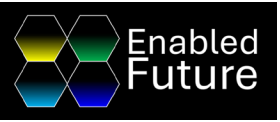


Syncrude In

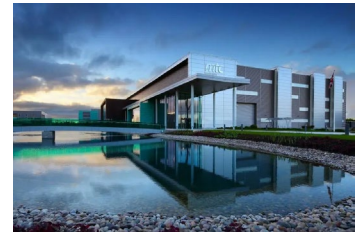
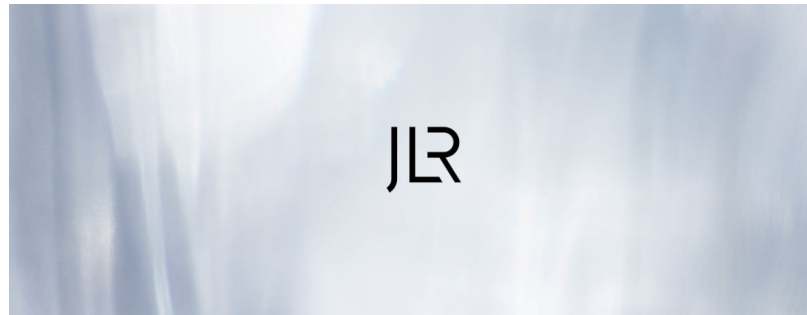


Source: Wagner da Silva, M; Engineering Practice Magazine, 10, 45, 2024

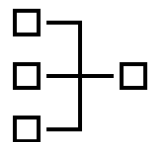
'The West Midlands Battery EcoSystem



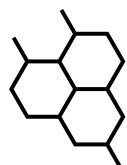
R&I,
Technology
Service
Providers



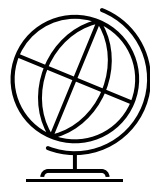
Take homes...



Think in terms of systems and compromises that come with that.



Organic chemicals can be critical – is this an opportunity or a threat?



Place yourself on the WMBE map and interact with your neighbours!

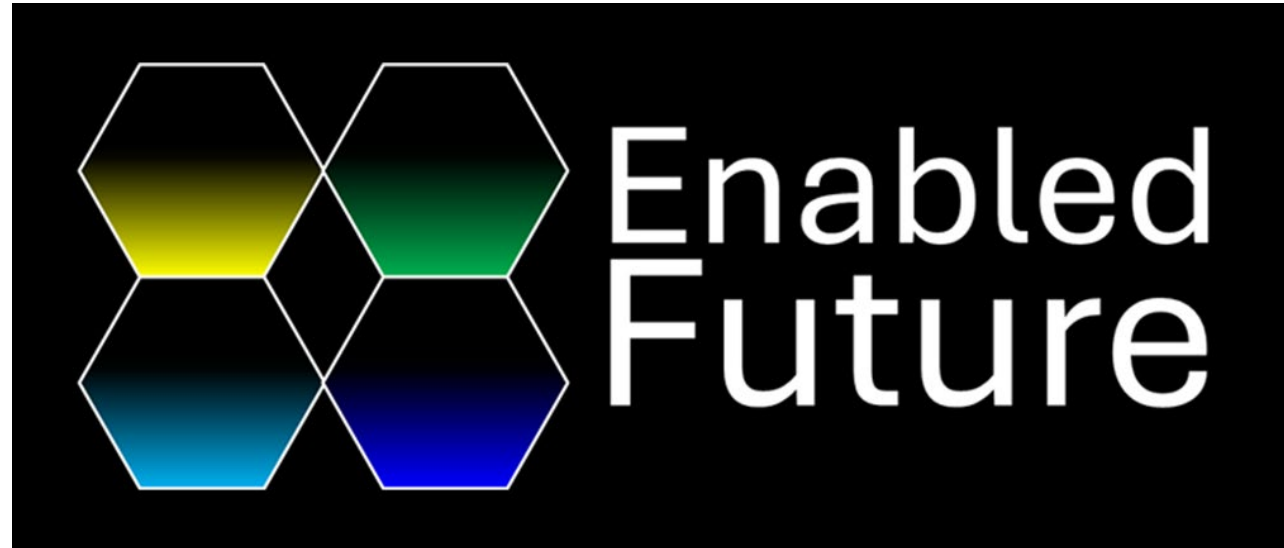
The 1st Asia- Europe Li-Ion Battery Recycling (AEBR) Week 2024

Checkout Our Next Event!



<https://www.barecycle.com/>

Visit EnabledFuture's Web Site for More Details!



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www.enabledfuture.com