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Sustainable Battery Recycling

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Although lead-acid batteries are a textbook example of a circular economy,

Incumbent lead recycling technology is energy-intensive and intrinsically polluting

Formal market

Facing critical challenges:

- Environmental regulations
- Energy & pollution control costs
- Net Zero Emissions of GHG

Informal market

- Responsible for lead poisoning of 1 in 3 children worldwide (UNICEF, 2020)
- Up to 50% of the market in LMICs (WEF, 2019)
- "Backyard" operations

Solveteq's technology enables sustainable recovery of lead from used batteries with minimal environmental impact

Our technology offers recycling companies:

Reduced compliance costs

Reduced energy consumption

Reduced carbon footprint

Minimal waste and emissions: lead, slag, SOx

1/10th CapEx

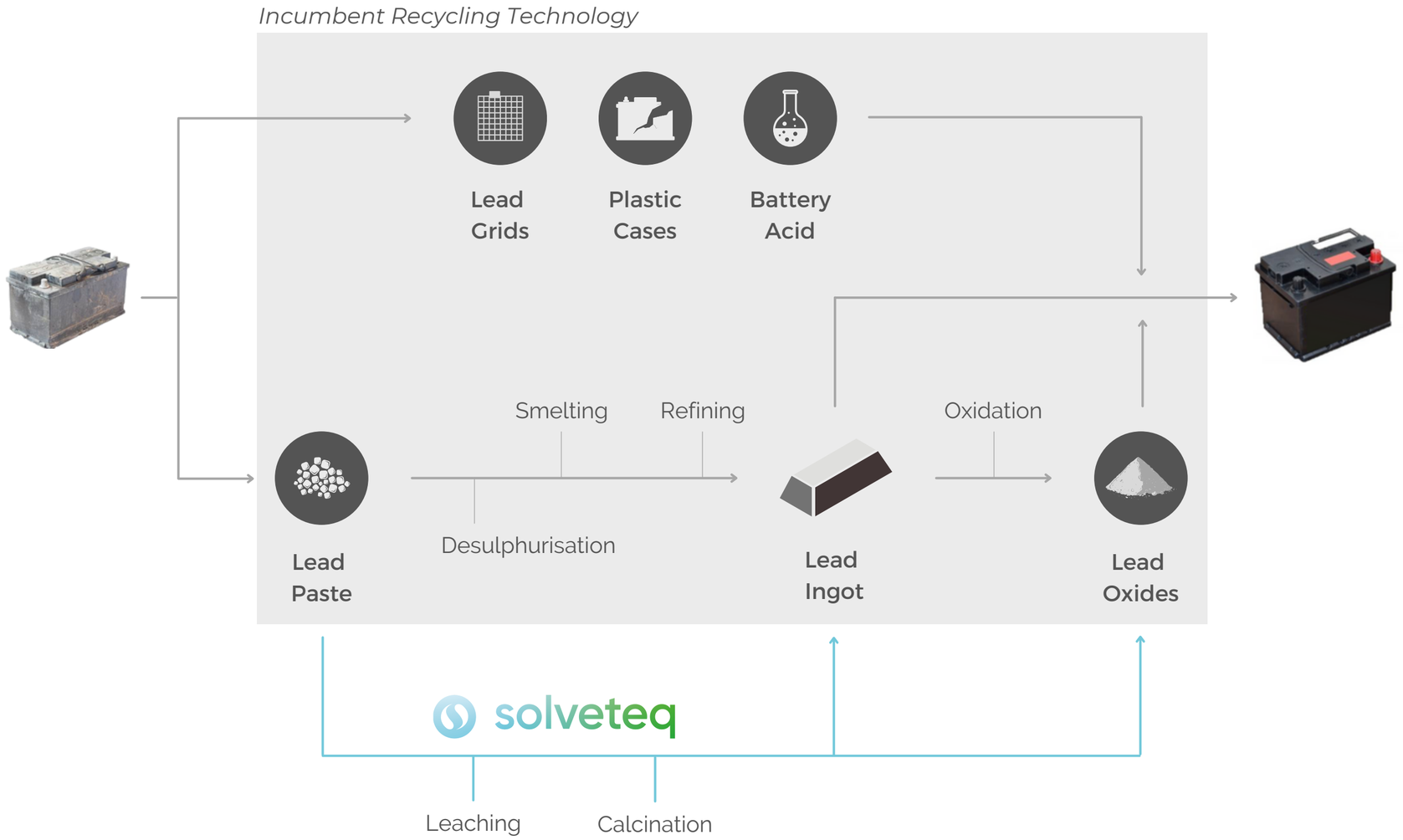
The Technology

Green

Proprietary

Modular

Scalable



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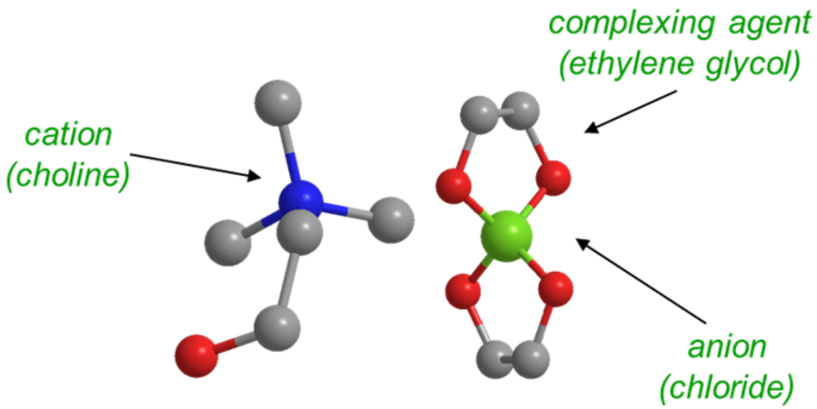
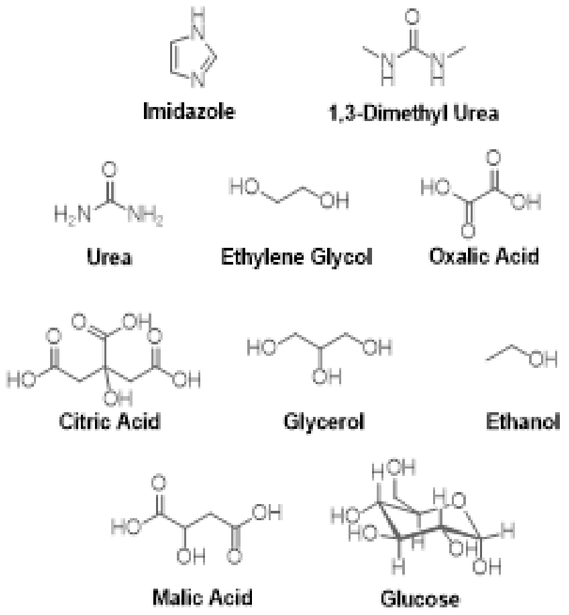
Deep Eutectic Solvents

2 component systems

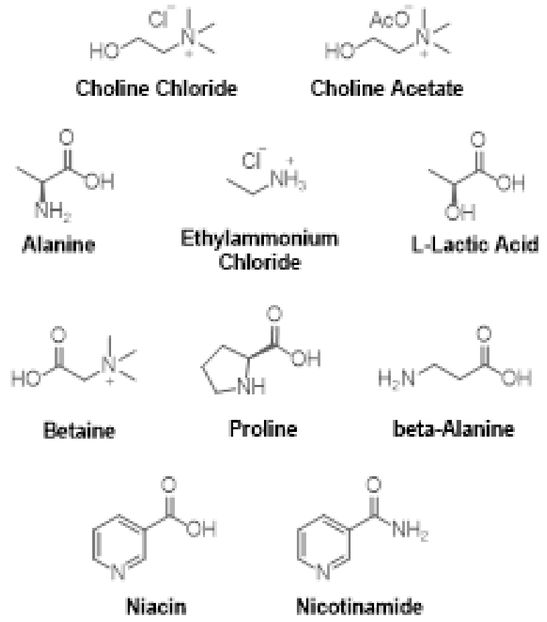
Not off the shelf but:

- Low-cost materials
- Readily available
- Benign chemicals
- Easy to synthesise
- Tunable properties





HBD



HBA

Solveteq to Date

Innovation presented at industry's flaghip conference

Prototype 1kg/hr

REUTERS

Start-ups aim to change car battery recycling, clean up world's most polluting industry

Link

First Paying Customer

2021

2023

Funding				
	Entrepreneurial Fellowship The Faraday Institution (£97k)*	Pre-seed Investment	Energy Catalyst Round 8 Innovate UK	Women in Innovation Award Innovate UK

OLA HEKSELMAN

CEO & Co-founder

- Co-invented technology
- Driving commercialisation & technology development
- 11 years in battery research
- Imperial, Oxford, St Andrews, CSIRO

DAVID PAYNE

Co-founder

- Co-invented technology
- Developed the initial research in this area
- Professor at Imperial College
- Director of Research Complex at Harwell

PAUL ARWAS

Chairman

- 20+ years in chemicals & renewables sector
- Former VP at Arthur D. Little
- Former Chair of Inflowmatix
- Chair of Heron Marine Services

MARK STEVENSON

Tech Advisor

- 40+ years in lead industry
- Globally esteemed expert
- Lifetime Achievement Award in 2019 for his commitment to lead industry

Imperial College London

Research Complex at Harwell

UNIVERSITY OF OXFORD

University of St Andrews

CSIRO

Thank you

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Sustainable battery recycling

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