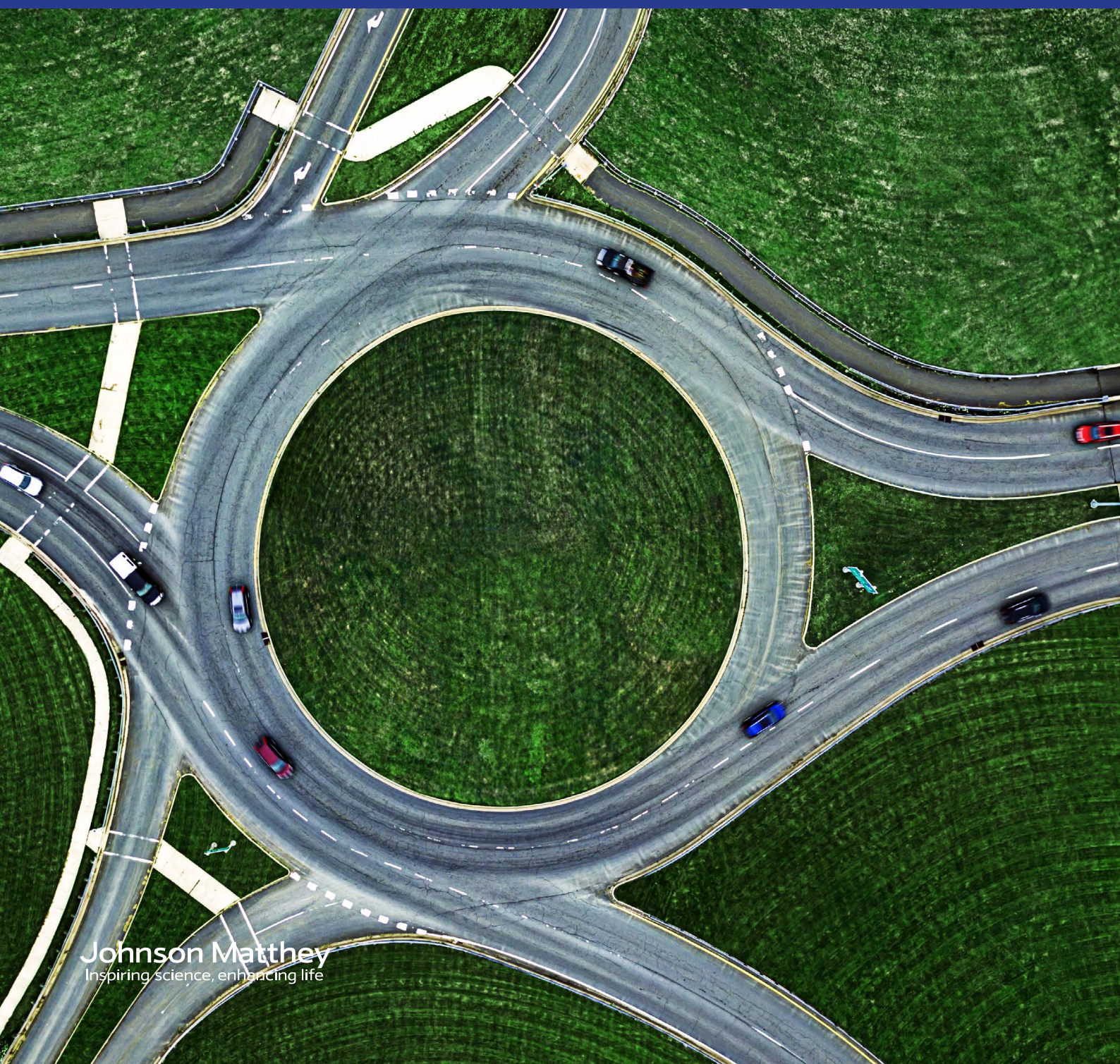


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Fuel cell recycling



Johnson Matthey
Inspiring science, enhancing life

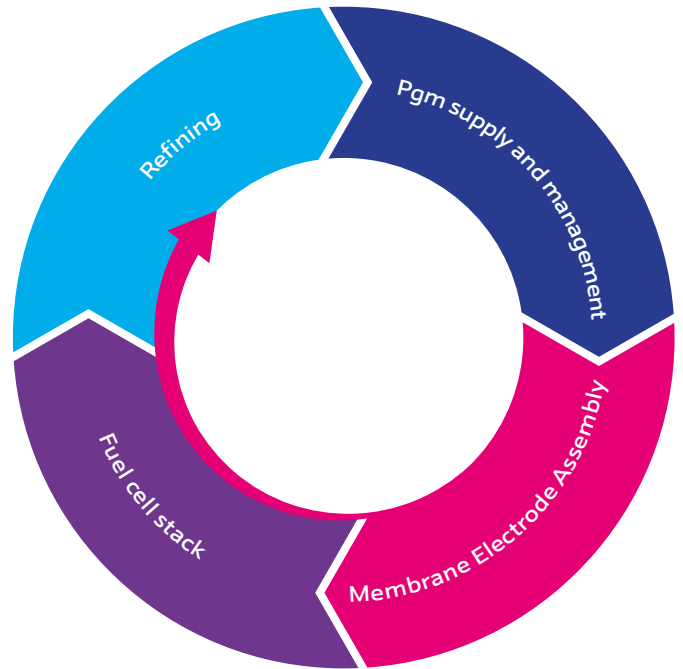
Fuel cell recycling

Recovering precious metals from fuel cell stacks

With renowned platinum group metal (pgm) expertise and exceptional refining capabilities, we can recover the precious metals from the entire life cycle of the fuel cells, from production to destruction. We do this using highly advanced processes that extract and separate pgms from Membrane Electrode Assemblies (MEAs) and fuel cell stacks, and refining them to a very high purity. As the world's largest secondary refiner of pgms and with operations in Europe, North America and Asia, we offer a complete refining solution with a full refine-supply cycle.

Through our deep understanding of materials science, pyrometallurgy, chemical separations and analytical science, we can maximise the recovery from your spent fuel cells. With complex sampling processes and analytical methods, we can process the entire stack to generate a homogeneous sample for full analysis. Then using accurate assaying techniques, we're able to yield a true representation of the entire material and determine the exact amount of pgm content you have. Once it has been refined, we'll then give you a pool of metal, which can be used for you to start fresh production from.

Our optimised process allows us to recover pgms quickly, efficiently, and securely. From initial material analysis to comprehensive metal management services, we guide and advise you at each step of the process.



For more information, including details of each step of our refining process, visit [matthey.com/refining](https://www.matthey.com/refining)

