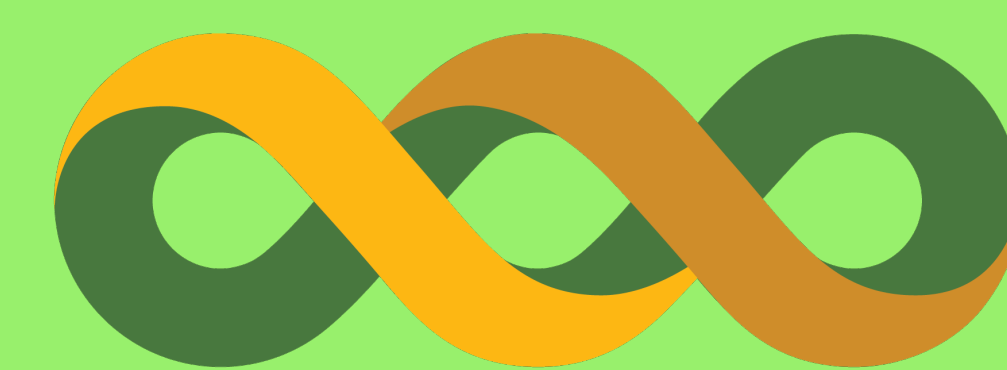


# Environmentally friendly metal catalyst recovery to support sustainable energy development and waste management

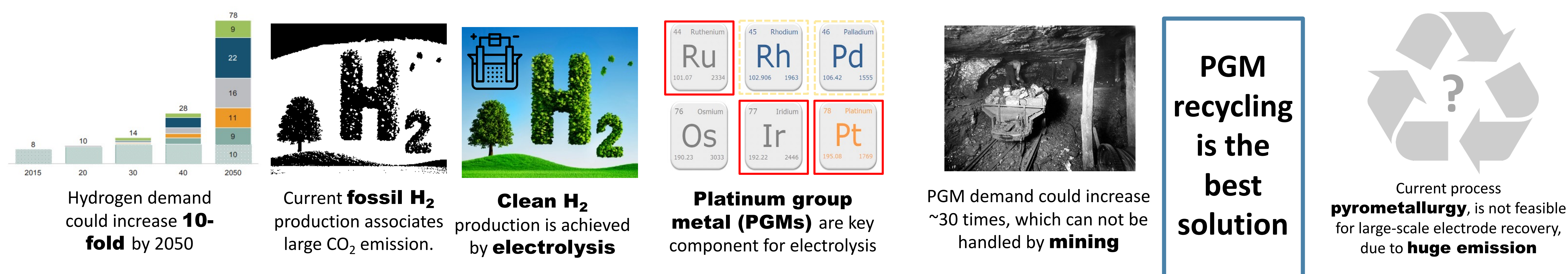
Sustainability



CRIMAREC

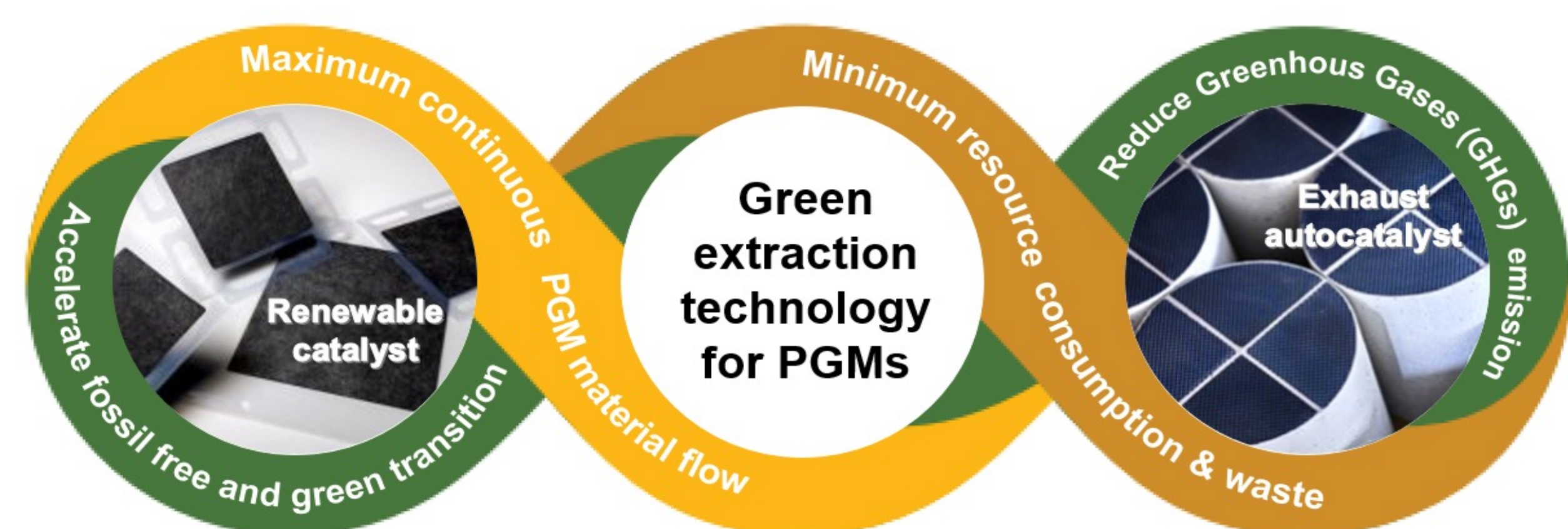
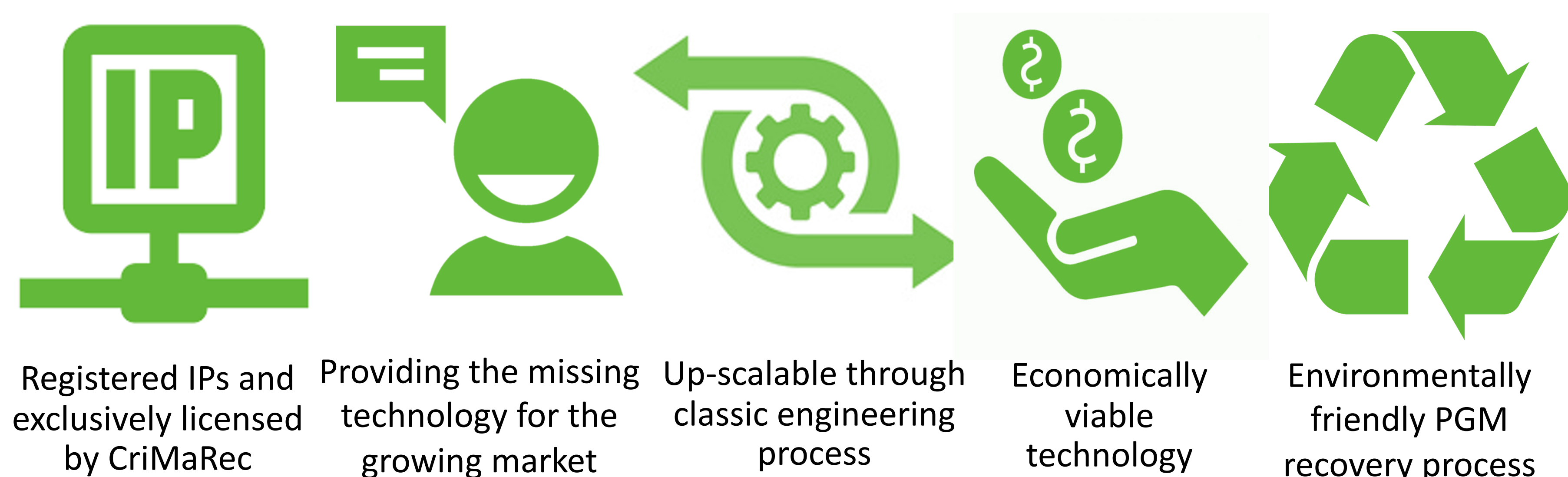
Critical Material Recovery

## Problem Statement

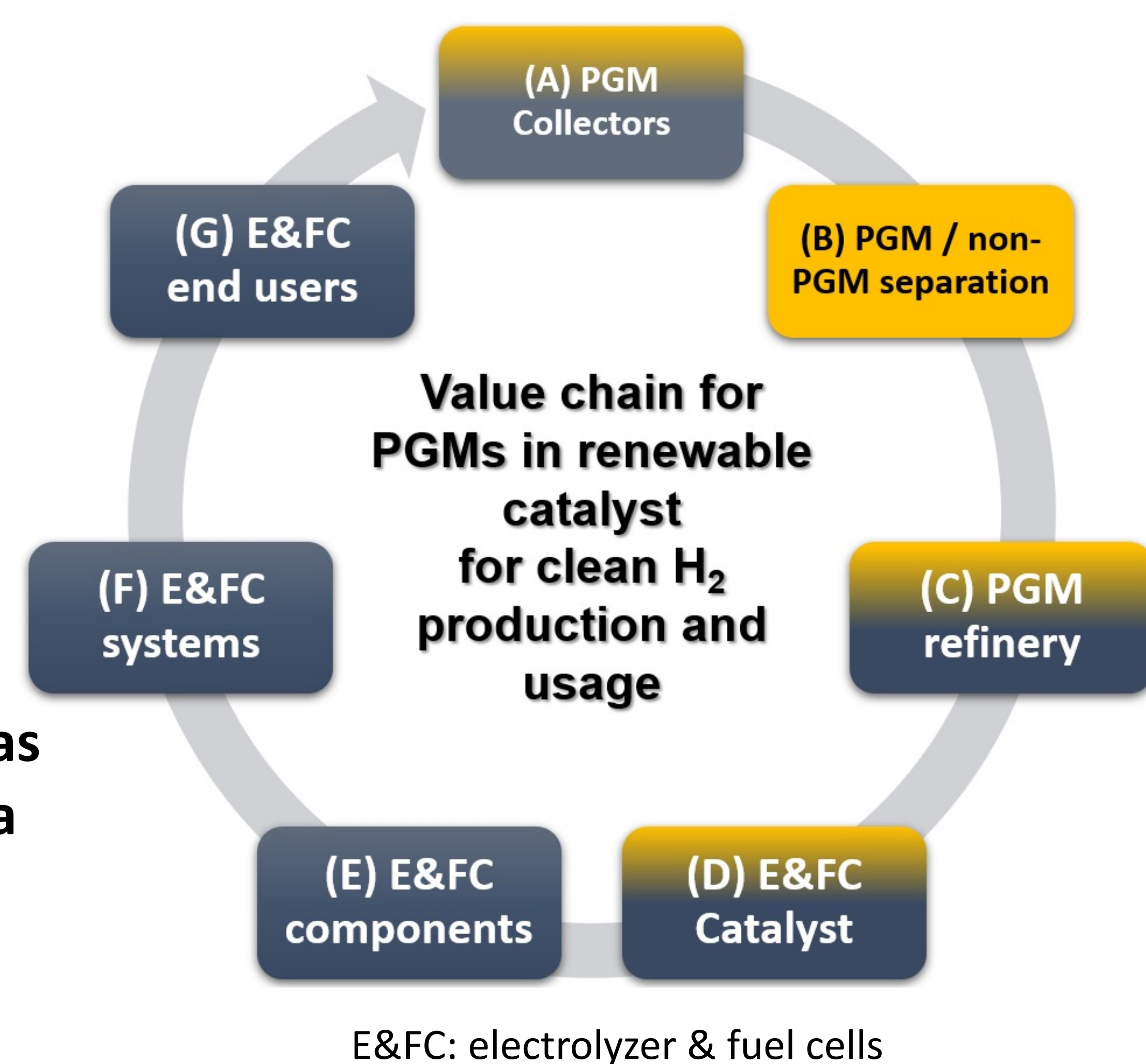


## Value Proposition

We directly extract PGMs from end-of-life products in a sustainable way!



Especially silicon carbide based autocatalyst and gas diffusion electrode have a huge demand for the technology with market demand accumulation!



### Technology Description

- The technology to be further developed and upscaled is a hydro-electrochemical route to dissolve and process metal catalysts directly targeting PGMs of high surface area.
- The dissolution is carried out in aqueous solutions using well-selected combination of mild, inexpensive chemicals with efficiency up to 99%.
- The kinetic can be further improved with additives or product-removers to reduce re-deposition or passivation.
- The process is flexible, easy and fast, which can be customized and combined towards individual demands.

### Intellectual Property Rights

- The patent application is in PCT phase.
- The associated IPRs including technology knowhow are exclusively licensed by CriMaRec.

### Team



PhD in Chemistry  
Shuang Ma Andersen  
CTO / Co-founder

Principle investigator in energy material and production process. Industrially applied research covers electrocatalyst, electrode structure and specialized in PGM catalyst recycling. Experienced in management, dissemination & collaboration



MBA  
Lars Christian Larsen  
CEO / Co-founder

25 years' experience in industrial catalyst market for diesel vehicles using PGMs, solid knowledge in business. Wide network in autocatalyst industries and engineering partners, OE project management in Europe, Russia, US and China.



MBA  
Jens Kristian Damsgaard  
Chairman of the board

Co-founder of several tech university spin-outs funded by venture capital. The spin-outs were either acquired their technology was licensed by corporates. Skilled in technology transfer, venture & corporate venturing.

### Current State

The technology is in trial operation of small scale with a few liters size. TRL 4, targeting to achieve 7 in the coming year



### Business opportunity and Call to action

The technology is especially developed towards silicon carbide based autocatalyst and fluorine containing gas diffusion electrodes. CriMaRec is currently participating a large EUPD project and prepare to establish more soft funding.

**We are looking for** Investors: Business angels or pre-Seed/Seed VCs.

Corporate partners: existing companies that would work with us on either the technology side or the commercial side.

