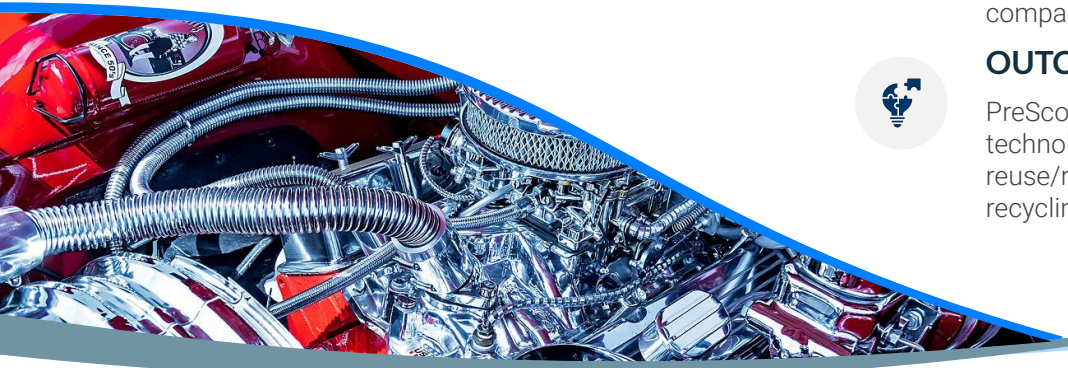
DISCOVERING NEW METHODS FOR RECYCLING AND REUSING ELECTRONIC COMPONENTS IN THE AUTOMOTIVE INDUSTRY

A Leading Automotive Supplier

The Client wanted to learn what novel approaches exist for the recycling and reuse of electronic components, an area challenging the vast majority of companies as more electronic components are degrading.



CHALLENGE

In this Research Support Service Project, the Client recruited PreScouter to discover current innovative approaches to reuse and recycle electronic wastes as well as relevant solutions applicable to the Client's business operations.

APPROACH

PreScouter created 4 Intelligence Briefs that investigated:

- Solutions in the industry and in academia to reuse and recycle electronic components.
- Innovative designs for easy disassembly. Disassembly methodologies included using robotic technology and AI, and (circular) business models.
- Recycling technologies such as pyrolysis, hydrometallurgical, and bio-metallurgical processes.

The PreScouter team looked into 60 companies and their technologies, conducted 7 subject matter expert interviews and assessed over 10 companies.

OUTCOME

PreScouter presented the Client with current recycling approaches, dismantling technologies, business models, and blockchain applications to improve reuse/recycling rates. The team also covered the best dismantling and recycling technologies for improving recovery rates when reuse is not feasible.