

UNDERSTANDING THE ELECTROLYSIS TECHNOLOGY LANDSCAPE FOR STRATEGIC INVESTMENTS



A Major Oil and Gas Player

The client was looking to explore and evaluate the electrolysis technology landscape for strategic investments in innovative solutions.



Challenge:

The client engaged PreScouter in this Research Support Service to help provide an overview of the electrolysis technology space as well as identify potential partners to be considered for investment. The ideal technology solutions would provide a step change and significant improvement in comparison to existing technologies.



Approach:

PreScouter collected information on technologies, vendors, and startups by accessing various resources, such as white papers, case studies, and press releases. The PreScouter team conducted interviews with vendors and gathered insights from subject matter experts, focusing on key areas such as:

- Alkaline Water Electrolyzers (AEL)
- Proton Exchange Membrane Water Electrolyzers (PEM)
- Solid Oxide Electrolyzer Cells (SOEC)
- Anion Exchange Membrane Water Electrolyzers (AEMWE)



Outcome:

PreScouter identified **more than 30 technology vendors** and interviewed 7 companies, providing the client with perspectives on investment costs, efficiency, operation temperatures, and projected future hydrogen prices. This research enabled the client to acquire a portfolio of current and emerging technologies, ready for large-scale deployment by 2030, offering improvements over existing solutions within the next 15-20 years.

