

TRENDS IN THE AREA OF ALTERNATIVE ENERGY RESOURCES FOR ELECTRIFIED RAILWAYS



A Multinational Consultancy Firm

The Client wanted to learn about new developments in the area of alternative energy sources for electrified railways such as solar, wind, hydrogen fuel cells, tidal, nuclear, and geothermal. They were also interested in energy management and storage solutions.



CHALLENGE

PreScouter's goals in this Research Support Service Project were to identify R&D activities worldwide and highlight the best practices used in different parts of the world regarding alternative energy sources for railway applications.



APPROACH

PreScouter conducted several interviews with Subject Matter Experts and also prepared an IP landscape of the past decade to help the Client understand who the leaders of development in the area of interest were. The PreScouter team differentiated the approaches of several countries and found leaders in the commercial sector that were actively involved in pilot projects.



OUTCOME

PreScouter presented to the Client:

- 4 companies developing solar/wind power energy solutions for electrified railways
- 10 solar power energy solutions
- 4 hydrogen fuel cell solutions for railways
- 2 tidal energy generator solutions
- 2 case studies of deploying geothermal energy for railroad station heating and powering railroads
- 6 developments and case studies in the area of energy storage solutions for railway applications from renewable sources

In addition, PreScouter presented the patent analysis and highlighted relevant partners and solutions for different scenarios.

