

Understanding the current and upcoming regulatory and technology landscape of amines



Global cleantech company specializing in energy from waste.

The client needed to get a better understanding of the amines used in carbon capture, the suppliers, and the current regulatory landscape for these compounds.



Challenge:

With amines being the most widely used chemicals for carbon capture (CC), the client needed to evaluate the current and upcoming challenges and regulations for amines and decomposition products in energy from waste plants with CC in Europe and the U.S. The client also needed information regarding testing requirements, players, and suppliers.



Approach:

PreScouter identified the applicable regulations and guidelines and gathered publicly available information such as emission limits, compounds toxicity, case studies, testing requirements for regulatory compliance from reports, research papers, and white papers. The PreScouter team also engaged with four subject matter experts for data validation and additional insights and reached out to technology providers to get non-publicly available information regarding regulation compliance, certification, and standards.



Outcome:

PreScouter presented the client with a regulatory framework of amine emissions and their decomposition products in post-combustion carbon capture plants. This included a forecast of upcoming regulations and challenges in the field, enabling the client to make more informed decisions. PreScouter identified 12 amine-based carbon capture technology providers, more than 10 research centers working in testing and/or deploying these technologies, and profiled over 20 demonstration and/or pilot testing projects.