PLENARY 2:

Wednesday Morning, 9:45 - 10:45 AM

Deployment of the First Hydrogen Liquefier at a Mine Site: Technical and Commercial Considerations for Decarbonizing Mining Infrastructure

H. Reynolds, N. Glasson, J. Meier, T. Morgan, B. Prince, Fabrum, Christchurch, New Zealand

This presentation describes the deployment of the world's first hydrogen liquefier at a mining site. A description of the overall project will highlight the commercial challenges faced and the practicalities of deploying hydrogen liquefaction plant at a mining site. Technical characteristics of the system will be detailed, including the cryocooler technologies employed and the impact of these choices on operating efficiency, industrial robustness, hazardous area compliance and total cost of ownership.

Key insights from this landmark project are presented along with the implications for hydrogen as a fuel for mining decarbonisation, including the economics of decentralized hydrogen production and liquefaction at point of use.