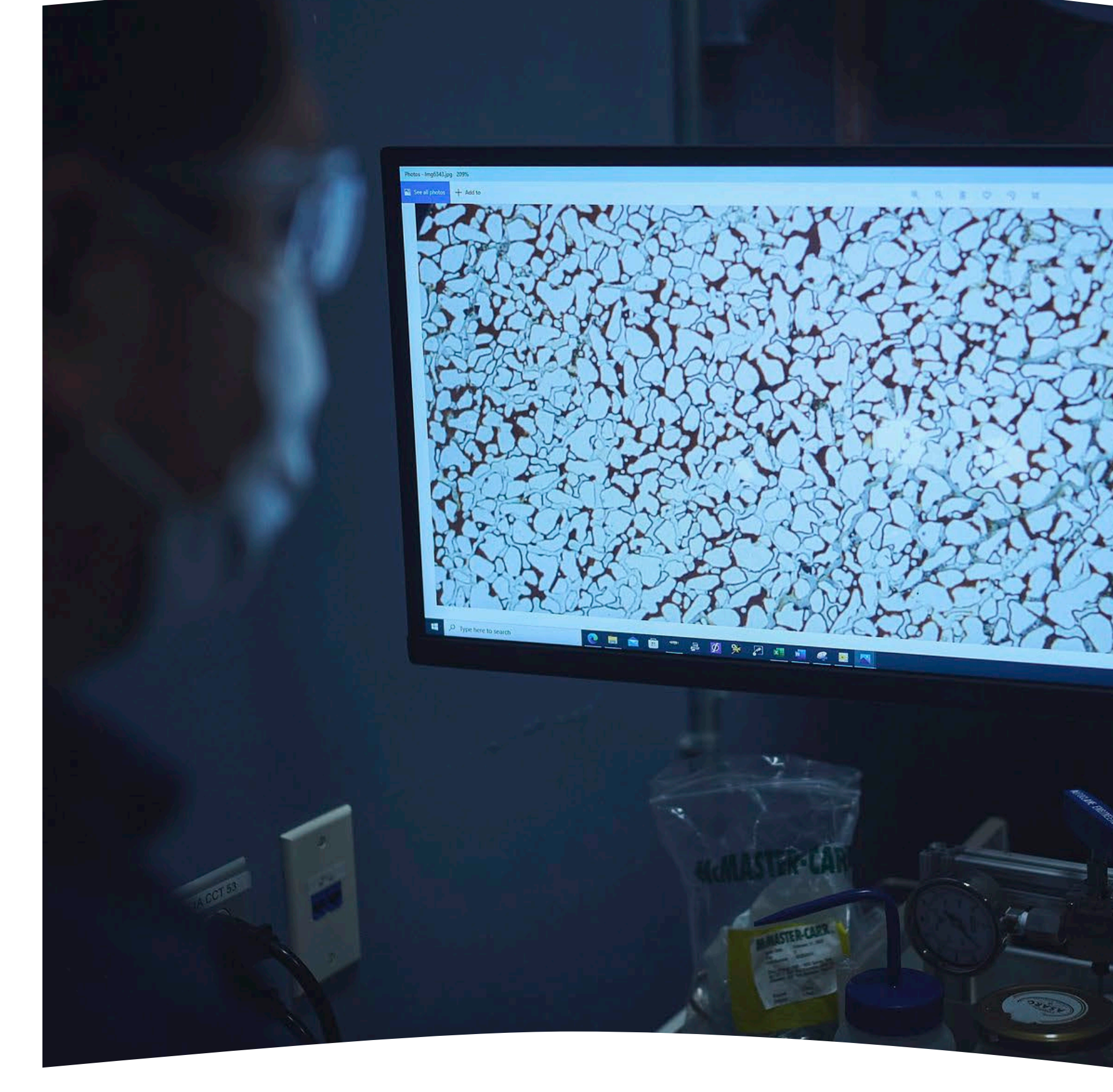
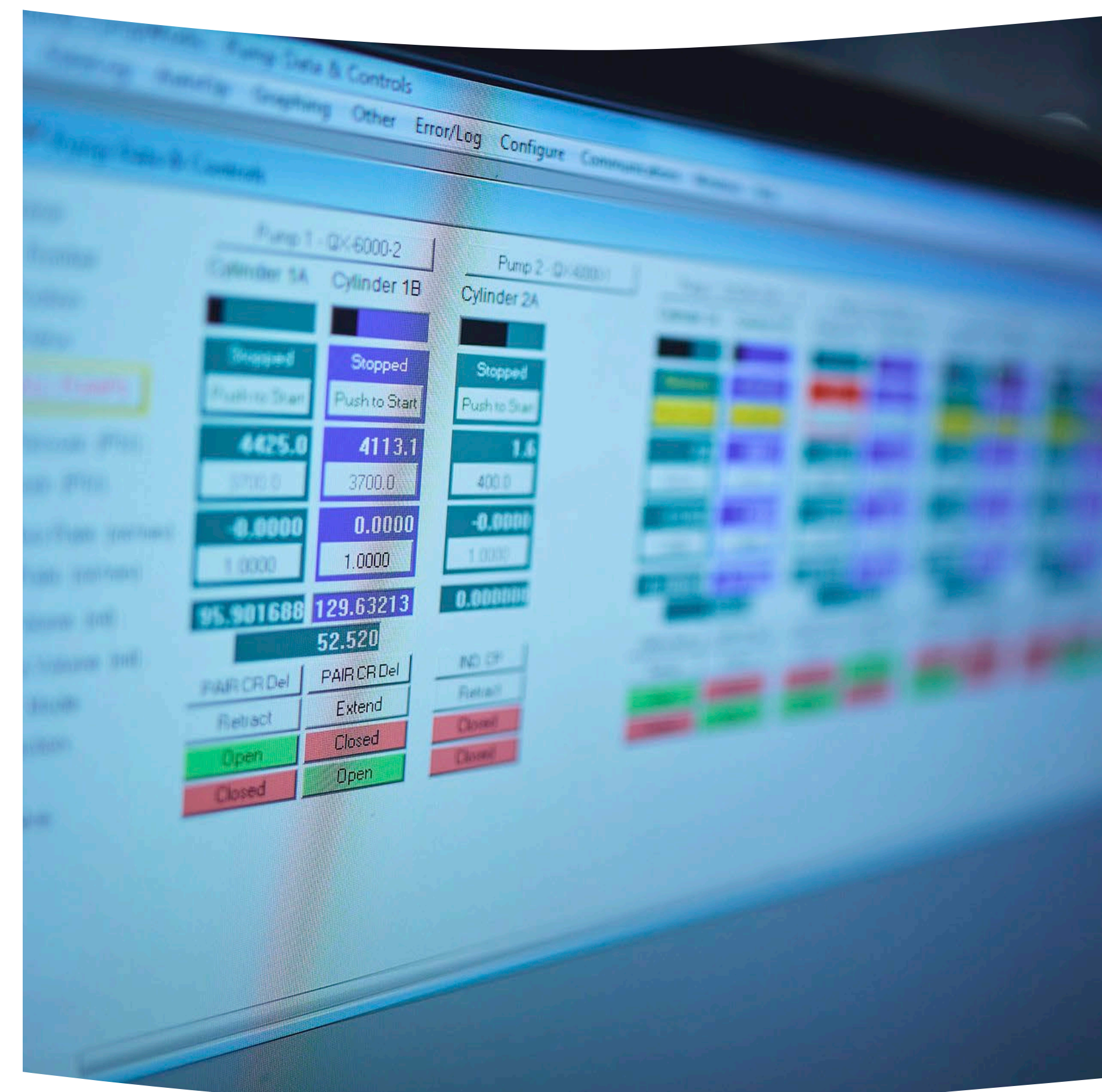
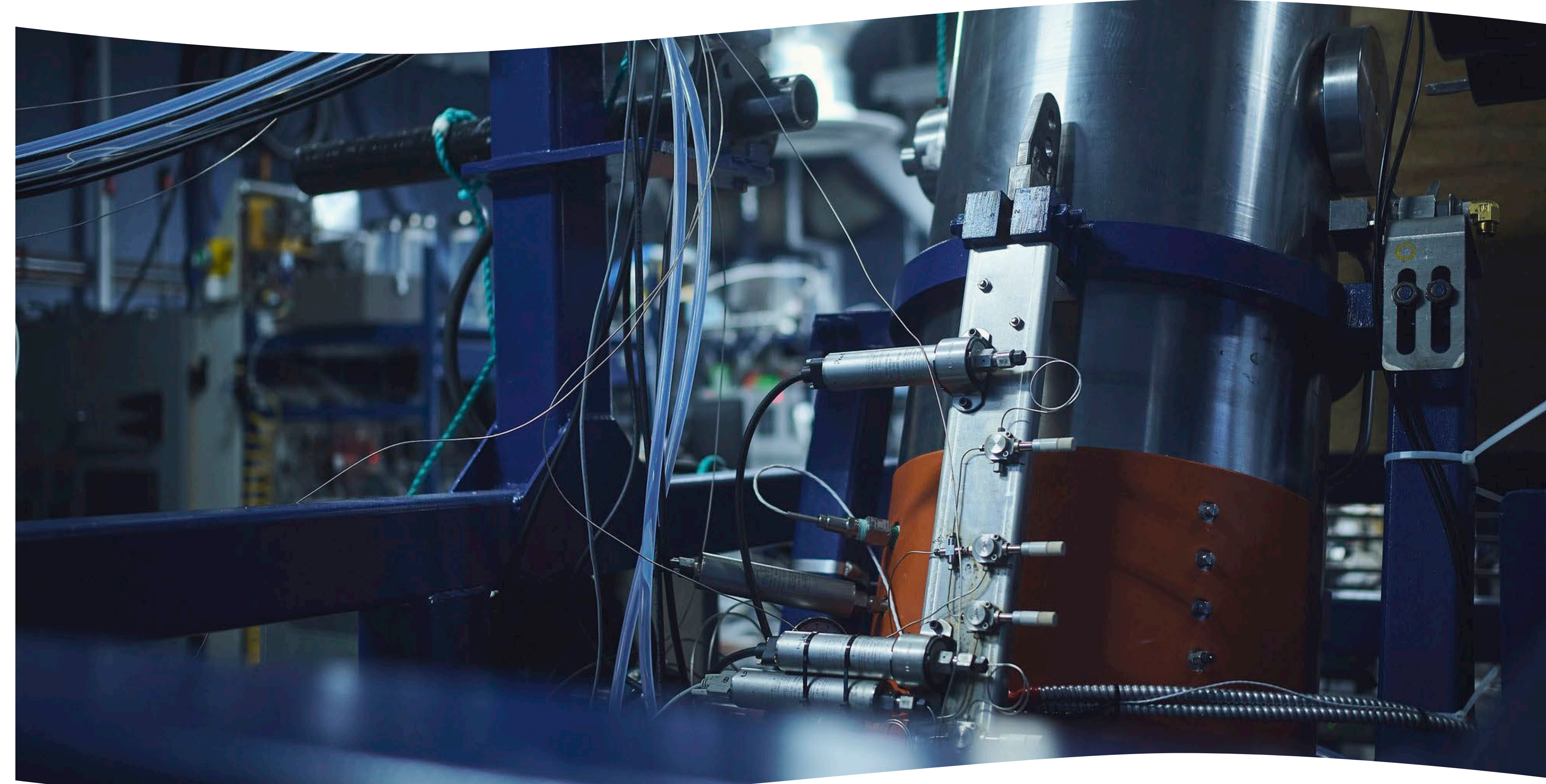


Summary

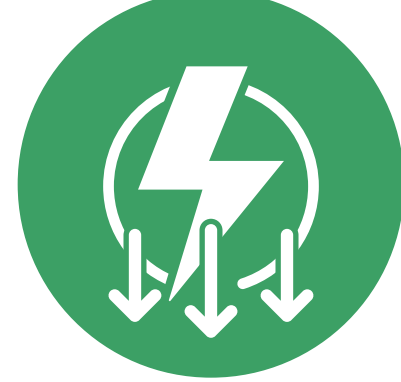



Target Emission Source: **Power Generation**
 Emission Reduction Strategy: **Production Optimization**
 Project Type: **Research & Development**
 Entry TRL: **6**
 Target TRL: **7/8**
 Field Trial Required: **Yes**
 Projected Ready By: **2024**

The Project

Cnergreen investigated the performance of its patent-pending ArmorFoam™ technology in laboratory-simulated offshore reservoir conditions. The studies showed that the innovative nanoparticle-based foam reduces the short-circuiting of injected gas/water and can potentially reduce fluid circulation and associated emissions. Reducing gas/water re-circulation reduces the power required for gas separation, compression and injection, thereby reducing greenhouse gas (GHG) emissions. A prototype equipment skid for a future field trial was also developed.



Benefits

-  Demonstrated, using ArmorFoam™, that less power is required for gas compression and injection, with ultimate GHG reduction
-  Completed equipment skid development required for ArmorFoam™ reservoir injection
-  Conducted on-land skid trial
-  Confirmed ArmorFoam™ can reduce hydrocarbon production carbon intensity

Opportunities & Next Steps

- Conduct onshore field trial in analogous reservoir to prove concept
- Seeking offshore operator and funding for project development and an offshore demonstration/field trial