


PROJECT SNAPSHOT



11 PARTNERS 

90 JOBS CREATED 

24 MONTH PROJECT 

SPLICE

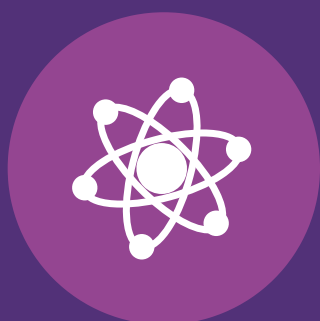
Single Photon LiDAR Imaging of Carbon Emissions

Partners:

QLM Technology, Aston University, Bay Photonics, BP, CSA Catapult, Land Instruments International, National Grid Gas, NPL, STL Tech, University of Bristol, University of Sheffield

CSA CATAPULT ROLE

PHOTONICS PACKAGE DESIGN | COMPONENT VALIDATION | CHARACTERISATION



SPLICE assembles a world-leading scientific and industrial consortium to develop and industrialise gas imagers based on time-correlated single photon counting. This is one of the early applications of quantum technology.

Aim: This project will develop gas imagers based on tuneable diode Lidar sensing technology and Short Wave Infra-Red (SWIR) detectors. These gas imagers will be used to monitor and control methane leaks and other fugitive carbon emissions.

- The Catapult will characterise commercially available emitter and detector components and benchmark them against technology developed in a project to optimise integration into the gas imager systems
- Estimated £15m revenue in just five years, by end of 2024
- CSA Catapult will perform Electro-Optic characterisation and environmental tests to validate the reliability of the modules developed throughout the project

PROJECT BENEFITS



Significantly increase the ability to use UK suppliers for both photonics components & the integrated packaging processes



Drastically reduce the complexity and cost of gas monitoring of large industrial sites



Reduces the effects of climate change by eliminating and controlling methane leaks