

# Innovate UK

**Results of Competition: IDP13 Special Project**  
**Competition Code: 1502\_SPECPRO\_STEPCO2**

**Total available funding is £4,838,288 from OLEV (£700k - £1.3m from LEFT Stream 1 budget and £3.5m -**

**Note: These proposals have succeeded in the assessment stage of this competition. All are subject to grant offer and conditions being met.**

Participant organisation names	Project title	Proposed project costs	Proposed project grant
Ricardo UK Ltd Hiflux Limited University of Brighton University of Sheffield - AMRC	STEPCO2	£8,350,337	£4,838,288
<b>Project description - provided by applicants</b>			
<p>Within the EU, Heavy Duty Vehicles (HDVs) are responsible for 30% of on-road CO2 emissions. Hybrid &amp; electrification strategies, now being introduced in the light duty vehicle (LDV) sector are ineffective in HDVs due to prohibitive on-cost, high associated mass &amp; compromised range &amp; load carrying capacity. Without a sector-specific carbon reduction technology, the contribution &amp; importance of HDV carbon emissions will inevitably rise as other sectors adopt effective low carbon propulsion solutions.</p> <p>To address the significant CO2 production within the sector, the UK Automotive Council roadmap calls for new thermodynamic cycles as a key medium-term objective. STEPCO2 represents a disruptive shift in combustion engine technology, &amp; addresses this call through the use of split cycle technology with a novel step to significantly increase engine efficiency. Extensive feasibility studies supported by test results from previous projects, indicate the technology has potential to radically increase the efficiency of an engine in a HDV application. The project objective is to progress this game-changing concept from a research environment towards a working concept demonstrator &amp; eventual application within HDVs, leading to drastic reduction in fuel usage &amp; CO2 emission within the heavy duty transport sector.</p>			

**Note: you can see all Innovate UK-funded projects here**

<https://www.gov.uk/government/publications/innovate-uk-funded-projects> Use the Competition Code given above to search for this competition's results