



Department
for Transport

Gas as a road fuel

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Department for Transport



2011 Logistics Growth Review: supporting the low carbon logistics sector

- Low Carbon Truck Trial
- Low Emission HGV Task Force



Low Carbon Truck Trial

- £11m funding
- Minimum 15% carbon savings
- Collaborative approach
- Demonstration and research
- Time line: August 2012 → December 2015

Summary of trucks & gas stations

	HGVs			Refuelling stations	
	Total	LNG	CNG	Shared access	Private
Planned	338	227	111	17	5
Operational June 14	244	144	100	6	2



Summary of LCT participants

Partners	Trial vehicles	Refuelling infrastructure
Muller-Wiseman, Chive Fuels, Cenex, Mira	40 LNG Volvo	LNG stations at Bellshill and Droitwich Spa
Biomethane Ltd, Wincanton Plc and Howard Tenens	15 LNG Mercedes Benz 12 CNG, DAF & Mercedes Benz	Six LCNG stations, locations tbc
Stobart, BOC Group	20 LNG Volvo	LNG station, Warrington
Brit European Transport, CNG Services Limited, Microlise Ltd	30 CNG Mercedes Benz 6 MAN CNG	CNG station, location tbc



LCT participants continued

Partners	Trial vehicles	Refuelling infrastructure
Tesco Engineering and the Hardstaff Group	35 LNG Mercedes Benz	No refuelling facilities included in the trial
John Lewis, Howard Tenens, Lenham Storage, Cambridge University	18 CNG DAF & Mercedes Benz	No refuelling facilities included in the trial
The Hardstaff Group, Tesco	35 LNG Mercedes Benz	LCNG station Avonmouth
Howard Tenens, John Lewis Partnership, Lenham Storage, Emissions Analytical, CMS Supatrak	41 CNG DAF & Mercedes Benz	CNG station at Howard Tenens depot in Swindon



LCT participants continued

Partners	Trial vehicles	Refuelling infrastructure
CNG Services, Chive Fuels, DHL, KBC Logistics	31 LNG Volvo & Mercedes Benz	Three new LNG stations, two depot installations and five station upgrades planned
CNG Services, Gasrec, Argos, DHL, Stobart	26 LNG including 5 Scania dedicated gas plus Volvo.	Planned LCNG station on/near Magna Park
G-Volution, Container Ships (UK) Ltd	10 LNG DAF	Planned LNG station at Trafford Park, Manchester
Container Ships (UK) Ltd, G-Volution	20 LNG MAN	Planned LNG station at Teesport



- Data gathering
- Emerging results

Average substitution rates

Dec 13	46%
April 14	51%

Carbon savings – tank to wheel

Dec 13	up to 9%
April 14	up to 15.3%



Evaluation: emerging issues

- Uncertainty over technology choice
- Technical challenge - accommodating equipment
- Delays and difficulties with planning permission
- Lack of public refuelling network
- Fuel availability



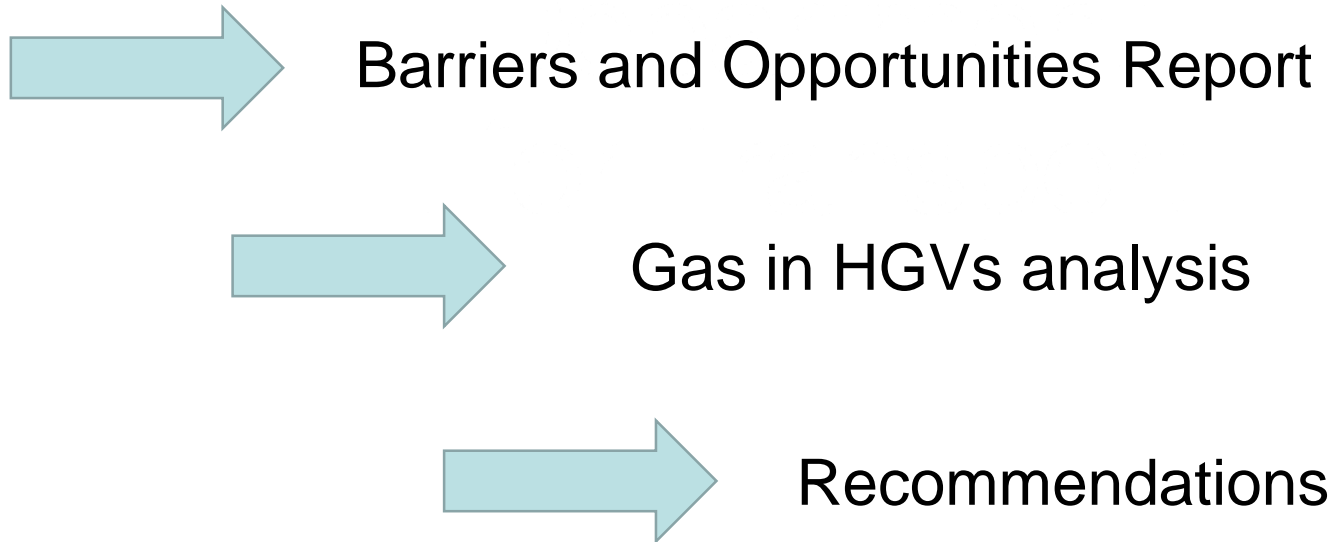
Evaluation - dissemination

- Executive Summary of the first year – GOV.UK
- Stakeholder workshops Jan 14 & Sept 14 at LCV2014 and Low Carbon Truck Village
- Second year and final reports – 2015 & 2016
- Gas Vehicle Hub website

Low Emission HGV Task Force

Membership: DfT, Defra, OLEV, fleet operators, LowCVP, Transport KTN, SMMT, CiLT, FTA & RHA

Remit: identify and promote low emission HGV technologies





Task Force Recommendations

- 1 Review the fiscal incentives for methane and biomethane transport fuels
- 2 Review the opportunities to promote uptake of low emission HGVs
- 3 Review the case for certification of biomethane for GHG reporting
- 4 Revise Construction and Use Regulations to add methane
- 5 Support EU discussions to include amendments to Directive 96/53 on weight classes for gas tanks
- 6 Support discussion on potential barriers to biomethane supply capacity for freight transport use
- 7 Quantify the extent of methane emissions from vehicles and infrastructure and consider how to address
- 8 Support establishment of strategic network of gas refuelling infrastructure
- 9 Support development of EU standards for refuelling infrastructure
- 10 Support development and implementation of gas fuel standards
- 11 Develop model scenarios for vehicle uptake and biomethane supply to determine potential GHG saving
- 12 Gather evidence on environmental case for methane from vehicle trials
- 13 Determine and demonstrate ancillary benefits e.g. air quality and noise
- 14 Improve evidence base of well to tank GHG savings from methane
- 15 Improve knowledge of methane powered vehicle numbers



Three main areas:

- Removing financial and legislative barriers
- Facilitating implementation and delivery
- Improving the evidence base



- Fuel duty differential fixed until 2024
- £4m OLEV funding for strategic gas refuelling network
- DfT to consult on changing RTFO for biomethane
- DECC consulting on changes to RHI tariff for biomethane grid injection
- Research underway to better understand well to tank GHG emissions for different gas sources
- Low Carbon Trucks trials providing real life data on gas truck performance
- Emissions testing to quantify methane slip



Gas in buses

- **Bus Service Operators' Grant:** 6p per km for biomethane buses
- **Green Bus Fund:** provided £2.1m funding for 88 biomethane gas buses
- **OLEV funding:** £30m for low emission buses; details including eligibility in autumn 2014
- **Clean Bus Technology Fund:** provided over £500,000 for gas buses and refuelling for Sheffield and Lincoln councils
- **Clean Vehicle Technology Fund**



Clean Vehicle Technology Fund

- Launched 2 June
- £5m for vehicle upgrades to reduce emissions in areas of poor air quality
- Local authority led
- Maximum £500,000 per bid
- Open to all types of vehicles
- Closes Friday 25 July
- Online application through www.gov.uk
- Decisions September 2014



Contacts and further information

Office of Low Emission Vehicles contact:

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Cenex: LCV2014 and Low Carbon Truck Trials workshop:

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Clean Vehicle Technology Fund (closes 25 July):

<https://www.gov.uk/government/collections/clean-vehicle-technology-fund>

DECC consultation on biomethane to injection to grid tariff review (closes 27 June):

<https://www.gov.uk/government/consultations/rhi-biomethane-injection-to-grid-tariff-review>

Task Force Recommendations on gas in HGVs:

<https://www.gov.uk/government/publications/low-emission-hgv-task-force-recommendations-on-use-of-methane-and-biomethane-in-hgvs>

Low Carbon Truck Trials, First year Executive Summary:

<https://www.gov.uk/government/publications/low-carbon-truck-trial-first-year-executive-summary>

Gas Vehicle Hub website (new site launching mid July) <http://gasvehiclehub.org/>

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