

Metier Response to Ofgem Call for Evidence RIIO-3 Wales and West Utilities

A. Organisation

Metier Ventures Ltd (14185016) and subsidiaries, collectively referred to as Metier.

Metier is a UK SME that has developed and licensed automotive technologies for 40 years, with a sustained focus on the cost effective reduction of greenhouse and air quality emissions.

Metier is responding as a UK energy consumer, a UK taxpayer, a stakeholder in the UK economy and an investor in the sustainable, affordable, zero emission future of energy and transport.

B. Network & Business Plan

Metier is responding to the Business Plan (BP) submitted for price control RIIO-GD3 by the Gas Distribution Network (GDN) Wales and West Utilities (WWU). Specifically, Metier is responding to support Section 3.1 Supporting Net Zero, Challenge 1: Move towards a ultra-low emission fleet¹.

This sets out WWU proposal to use NIA and NZARD UIOLI funding to plug gaps and address uncertainties in achieving net zero and reducing Scope 1 and 2 vehicle fleet emissions, as required by the WWU Environmental Action Plan (EAP)². WWU fleet comprise 91% of Scope 1 and 2 emissions, excluding shrinkage².

The EAP sets out targets for fleet emission reduction through the Business Carbon Footprint (BCF) Reference C2. The BCF is included in the Annual Environmental Report (AER) as a reputational Output Delivery Incentive (ODI-R) for RIIO-3 Sector Specific Methodology Decision³.

C. Confidentiality

This response is not confidential.

¹ WWU Business Plan 2026-31 https://www.wwutilities.co.uk/media/6042/1-business-plan-main-document_link-update_2301.pdf

² WWU Environmental Action Plan <https://www.wwutilities.co.uk/media/5995/48-environmental-action-plan.pdf>

³ Ofgem RIIO-3 Sector Specific Methodology Decision – GD Annex
https://www.ofgem.gov.uk/sites/default/files/2024-07/RIIO-3_SSMD_GD_Annex.pdf

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D. Issue / Support

Metier supports WWU intent to deploy an ultra-low emission commercial vehicle fleet, and to apply NIA and NZARD UIOLI funding to plug gaps and address uncertainties in fleet operating requirements vs vehicle technology, to achieve net zero and reduce Scope 1 and 2 vehicle fleet emissions.

During RIIO-2 WWU has made a 67% reduction in emissions of its company car fleet, transitioning from primarily a diesel fleet to a fleet of ULEV, 95% of which are electric or plug-in-hybrid¹.

However, during RIIO-2, WWU has identified that the critical infrastructure demands for the majority of its industrial and commercial vehicle fleet cannot be delivered by battery electric vehicles (EVs), and that other zero emission equivalents are required, specifically hydrogen^{1, 2}. This fleet comprises approximately 40% of Scope 1 to 3 emissions, excluding shrinkage².

Consequently during RIIO-2, WWU has evaluated a hydrogen fuel cell electric vehicle (FCEV) with positive results, and has also actively tracked the development of hydrogen direct combustion as an alternative that can deliver full towing and on-board power requirements at a highly competitive vehicle cost (comparable to compressed or liquefied natural gas vehicles)^{1, 2}.

During RIIO-2 Metier has collaborated with WWU in demonstrating hydrogen direct combustion, the opportunity to utilise low cost industrial or combustion grade hydrogen (as may be delivered by pipeline), and assessing feasibility of hydrogen direct combustion in WWU commercial vehicle fleet.

WWU has now set out a detailed plan to evaluate and deploy hydrogen commercial vehicles including hydrogen direct combustion, to ensure that it can continue to deliver emission reduction commitments whilst maintaining a safe and resilient network, at an affordable cost to consumers⁴.

The £10.7m of NIA and NZARD UIOLI funding enables WWU to demonstrate operation of hydrogen combustion engine vehicles (HCEV) converted from diesel, continue RIIO-2 research to validate fleet operating demands against available technologies, feed requirements back to vehicles OEMs, determine strategy for hydrogen refuelling locations, and confirm capital budget requirements to deploy a ULEV fleet⁴.

Metier fully supports this WWU initiative in reducing emissions of its 1,400 commercial vehicle fleet, recognising that as a critical infrastructure provider WWU has an exceptional challenge in achieving net zero, maintaining safety and resilience in the network, and delivering this within required timescales and at affordable cost.

Metier also understands that the same challenges and opportunity to decarbonise this hard to abate sector are shared by other GDNs and the Gas Transmission Network, and other fleet operators, especially those in the utilities and construction sectors with demanding duty cycles.

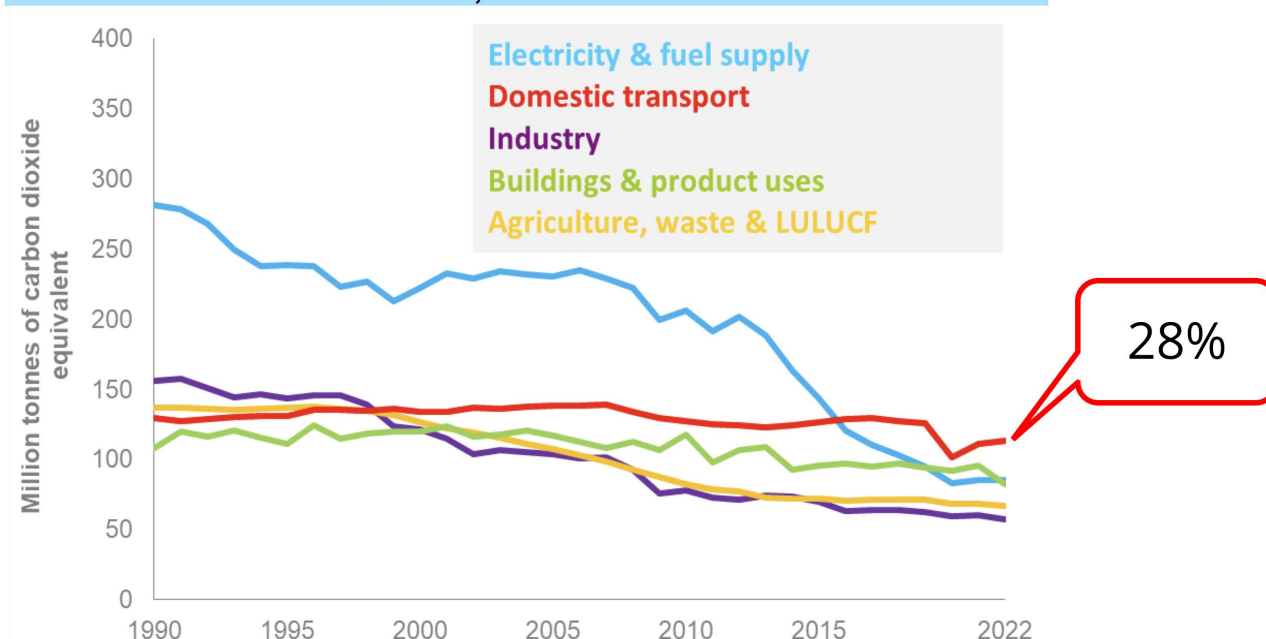
⁴ WWU Innovation Strategy <https://www.wwutilities.co.uk/media/6004/55-innovation-strategy.pdf>

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E. Justification

- 1) **Transport sector emissions are hard to abate** – even with all efforts over the last 20 years and more, with currently available low and zero emission vehicles and energy sources, UK transport sector emissions are now the largest GHG emitting sector comprising 28% of UK GHG emissions and having reduced only 12% since 1990, whilst consuming the largest 42% of final energy use⁵.

Territorial greenhouse gas emissions by territorial emissions statistics sector, 1990 to 2022



- 2) **Because oil is very hard to replace** – transport emissions have remained high as it has been very challenging to replace liquid fossil fuels, which comprise 93% of transport final energy consumption⁵. For comparison in energy terms, this is more than two times the UK final consumption of electricity.

2023

Million tonnes of oil equivalent

	Industry	Transport	Domestic	Services ¹	Total	TWh	GW
Coal & manufactured fuels	1.0	0.0	0.3	0.0	1.2	14	1.6
Oil	2.2	48.9	2.1	3.5	56.6	658	75.1
Gas	7.5	0.1	20.4	7.7	35.6	414	47.3
Electricity	7.4	0.9	8.0	6.8	23.1	269	30.7
Bioenergy and heat	2.3	2.6	1.6	1.8	8.4	98	11.2
Total	20.4	52.6	32.2	19.8	125.0	1454	166.0

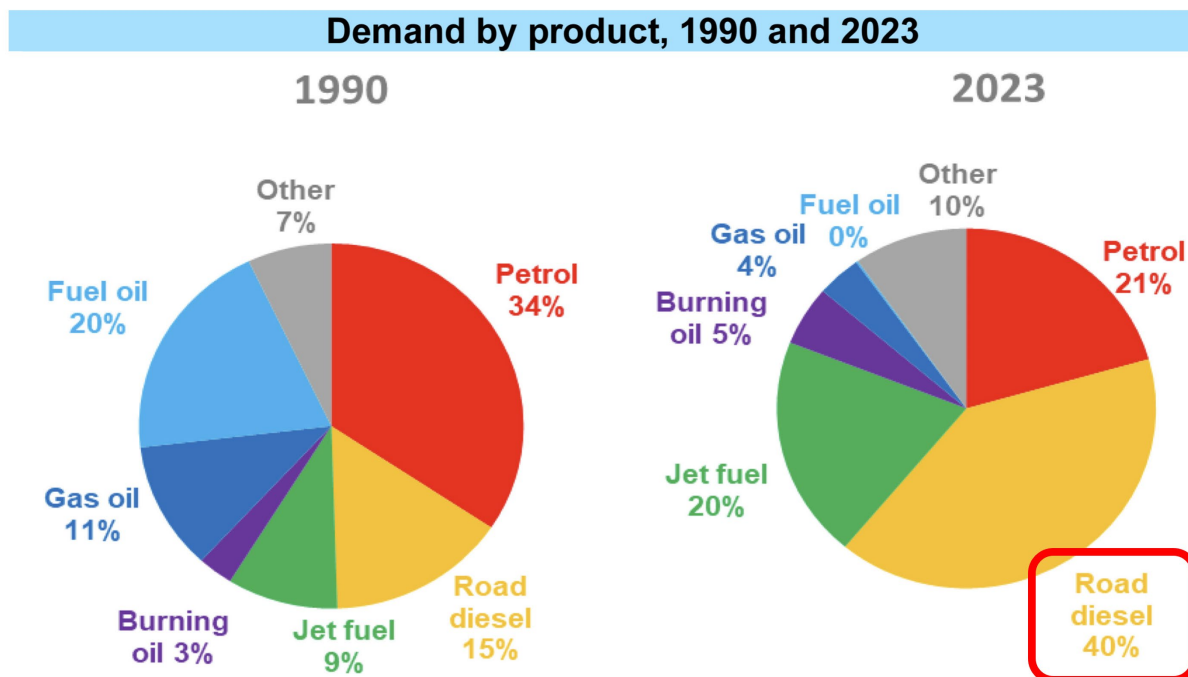
(1) Includes agriculture, commercial, public administration and miscellaneous.

⁵ DESNZ UK ENERGY IN BRIEF 2024

https://assets.publishing.service.gov.uk/media/66a76bf2ce1fd0da7b592e5d/UK_Energy_in_Brief_2024.pdf

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- 3) **And the largest and growing contributor is diesel for road transport** – road diesel now accounts for 40% of UK petroleum consumption⁵, and commercial vehicles are fuelled almost exclusively by diesel due to both utility and total cost of operation.



- 4) **And there are very specific challenges to replace diesel in commercial vehicles** – the light commercial vehicle (LCV) or van market is more advanced than the heavy duty vehicle market in offering zero emission options, and provides a clear indicator of commercial vehicle market adoption of diesel alternatives. The market uptake of electric vans stalled in 2024⁶ at 6.3% even with 3% growth in the overall market, 20% more options coming to market, and the UK ZEV mandate targeting 10%. The reasons for this lack of uptake by commercial fleets which include range, utility for on-board power and towing, vehicle weight, cold climate tolerance, charging time and ability for drivers to charge, were set out to government by WWU in 2023⁷. The same barriers to EV adoption have been reported by other commercial fleet operators and utilities⁸. These same EV challenges apply to a greater extent for heavy duty commercial vehicles as also used in WWU fleet, and which individually use significantly more fuel than LCVs.
- 5) **Hydrogen is emerging as a viable commercial vehicle transport fuel for FCEV and HCEV** – prototype hydrogen FCEV LCVs have been trialled by multiple commercial fleet operators including WWU⁹ to qualify performance before deployment, and initial production vehicles are being

⁶ <https://www.smmmt.co.uk/2025/01/electric-van-demand-static-in-2024-despite-biggest-overall-market-in-three-years/>

⁷ <https://committees.parliament.uk/writtenevidence/124743/pdf/>

⁸ <https://www.fleetnews.co.uk/features/anglian-water-plots-its-route-to-a-net-zero-fleet>

⁹ <https://www.wwutilities.co.uk/news-and-blog/record-distances-achieved-during-fcev-trials-with-wales-west-utilities/>

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introduced to the UK market in 2025 by Stellantis¹⁰. Prototype FCEV HGVs are scheduled to be trialled in the UK through the government funded ZEHID program in 2026¹¹, including the HyHAUL program with which WWU is partnering¹². Trialling of these vehicles and the associated early stage hydrogen infrastructure is not business as usual and requires additional investment. In parallel, multiple industrial and commercial vehicle manufacturers are developing HCEVs as an affordable hydrogen fuelled vehicle technology to enable higher rates of fleet adoption, and in the EU assist manufacturers to meet their GHG reduction targets as defined in EU law¹³. These manufacturers and tier 1 suppliers include:

- a. Volvo¹⁴
- b. Mercedes¹⁵
- c. MAN¹⁶
- d. DAF¹⁷
- e. Iveco¹⁸
- f. Hyundai¹⁹
- g. Cummins²⁰

- 6) **Policymakers are recognising that rapid and affordable decarbonisation of commercial fleets requires HCEV** – the EU has incorporated HCEV within a structured framework to decarbonise commercial vehicle fleets¹³. UK activity to date has focussed on off-highway machines, and identified HCEV as a rapid and least inflationary approach to emissions reduction, with a recommendation for on-highway application²¹.

¹⁰ <https://www.media.stellantis.com/uk-en/vauxhall/press/vauxhall-reveals-pricing-and-specification-for-movano-hydrogen>

¹¹ <https://www.gov.uk/government/publications/zero-emission-heavy-goods-vehicles-and-infrastructure-competition-winners/zero-emission-heavy-goods-vehicles-and-infrastructure-competition-winners>

¹² <https://hyhaul.co.uk/>

¹³ <https://eur-lex.europa.eu/eli/reg/2024/1610/oj>

¹⁴ <https://www.volvotrucks.com/en-en/news-stories/press-releases/2024/may/Volvo-to-launch-hydrogen-powered-trucks.html>

¹⁵ <https://www.daimlertruck.com/en/newsroom/pressrelease/successful-development-project-for-hydrogen-combustion-engines-52773753>

¹⁶ <https://press.mantruckandbus.com/corporate/man-expands-its-zero-emission-portfolio/>

¹⁷ <https://www.daf.co.uk/en-gb/trucks/alternative-fuels-and-drivelines/hydrogen>

¹⁸ <https://www.iveco.com/global/Press/PressReleases/2024/IVECO-strides-ahead-on-the-road-of-change-with-zero-emission-offering-unveiled-at-IAA-Transportation-2024>

¹⁹ <https://www.hd-infracore.com/en/company/media/news-view/20175115?page=0&>

²⁰ <https://www.cummins.com/engines/hydrogen>

²¹ https://www.apcuk.co.uk/wp-content/uploads/2024/11/H2ICE-Task-and-Finish-Group-Report-Content_Oct-2024_final.pdf