

## Key Achievements 2021-22

### Working together to a zero emissions future

In the past year we've successfully delivered over 50 initiatives, all with one ultimate aim: to accelerate transport to zero emissions.

To play your part in any of our future projects, please contact the Zemo team at [Hello@Zemo.org.uk](mailto:Hello@Zemo.org.uk)

Project	Description	Link
<p><b>Zemo Events:</b> we've run over 40 workshops, webinars, meetings and conferences across working groups, informing and engaging more than 1,500 stakeholders on all aspects of achieving our zero emissions future.</p>		
<p><b>Good COP? Bad COP?</b> <b>What does COP26 mean for us?</b></p>	<p>An unmissable member-only webinar providing exclusive insight into the key outcomes from the landmark COP26 conference and the impact these might have. Members were treated to a live Q&amp;A session with Bob Moran (Head of Environment Strategy, DfT) and the views from leading industry stakeholders and Zemo Board Members on what COP26 now means for them, for Zemo &amp; for UK transport. Supported by our dedicated COP26 daily live news page.</p>	
<p><b>Zemo Virtual Annual Conference 2021</b></p>	<p>Over 550 industry experts joined us online for an action packed day of lively discussion, engaging debate and analysis on what our zero emission revolution really means for us as consumers, industry and society as a whole. Influential stakeholders considered the challenges and solutions ahead, with keynote speech from <b>Transport Minister Rachel Maclean MP</b>. An overwhelming 82% rating the event as 'very good' or 'good'.</p>	
<p><b>Life Cycle Analysis Webinar Series 2022</b></p>	<p>Zemo are at the forefront of exploring vehicle lifecycle CO<sub>2</sub>e emissions, running a series of high profile webinars with the APC, highlighting the true environmental impacts of zero emission vehicles and necessity to consider this within policies; well over 250 attendees.</p>	
<p><b>External Events, Presentations and Seminars</b></p>	<p>Throughout the year, we proudly supported DfT and our determination to secure a sustainable, zero emissions transport future for all by attending numerous events; taking part in industry leading seminars and conferences; chairing many influential panel discussions and debates.</p>	
<p><b>Zemo Working Groups</b></p>	<p>Our working groups are at the heart of what we do, engaging and inspiring members; bringing industry and Government together. Last year, despite the limitations of Covid, we successfully held over 30 meetings.</p>	

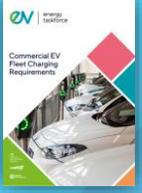


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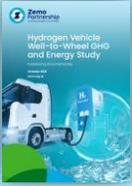
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<p><b>Electric Vehicle Energy Taskforce:</b> bringing senior cross sector stakeholders together to guide Government and industry on ensuring our energy system is fully ready for the mass take up of EVs.</p>		
<p><b>Electric Vehicle Energy Taskforce: Phase 3 – Delivering System Success</b></p>	<p>At the request of Government, Zemo Partnership have continued to build and manage this highly influential taskforce for a fourth successful year; with the focus now very much on turning proposals into actions.</p>	
<p><b>Charging the Future: Drivers for Success 2035</b></p>	<p>This landmark EV Energy Taskforce report provides an independent assessment of the infrastructure challenges ahead and, for the first time, uses sophisticated multi-sector modelling to give an industry agreed consensus on the UK charging infrastructure required in 2035 and the enabling conditions necessary to deliver it.</p>	
<p><b>EV Charging Landscape: Progress Report 2022</b></p>	<p>The EV Energy Taskforce embraces multiple sectors; so this ongoing report takes a step back and objectively reviews the current state of the UK EV charging landscape and, crucially, progress against the 21 essential proposals originally identified by the Taskforce; celebrating success and highlighting the priority actions still needed.</p>	
<p><b>Engaging Consumers in Smart Charging</b></p>	<p>This report outlines a series of concrete and ambitious industry-backed recommendations to deliver a good smart charging &amp; EV services user experience, empower consumers to make informed decisions &amp; feel confident they'll be treated fairly and able to navigate the market.</p>	
<p><b>Encouraging Investment in UK Public EV Charging</b></p>	<p>An in-depth study exploring the different business models used within the charging market, providing policy-makers with the information and analysis needed to make clear, bold decisions that remove barriers &amp; offer the solutions and incentives necessary to stimulate investment.</p>	
<p><b>Data Accessibility and Privacy</b></p>	<p>This EVT report recognises the vital importance of data privacy and security and the need to build consumer trust and confidence, mapping out our EV charging system data flows to provide an infrastructure outputs 'gap analysis', identifying the key issues and solutions needed.</p>	
<p><b>Cyber Security and Smart Charging</b></p>	<p>Exploring the issues and uncertainties around EV charger interoperability, cyber security, data privacy, grid flexibility and stability; the interventions urgently required to overcome these challenges and need for a collaborative approach to advise Government on future standards.</p>	



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Road Transport Transition Council	Recognising the significant influence and expertise within the EV Energy Taskforce, we provided comprehensive support and advice to the new RTTC, formed by Government to co-ordinate EV policy and optimise market conditions for adoption & charging infrastructure.	
Standards for Complaint Handling across the EV User Experience	To build consumer trust and confidence in our electric future, the automotive, infrastructure, charging & energy sectors must work together to ensure any complaints are dealt with seamlessly and fairly. This ongoing project is developing standards to guarantee this happens.	
<p><b>Our new Energy Infrastructure Working Group,</b> chaired by Lorna McAtear from National Grid, builds on the work of the Electric Vehicle Energy Taskforce by providing a coordinated collaborative Zemo forum for members and Government to actively support and deliver the electrification initiatives identified.</p>		
Electrification of Depot-Based Fleets	A series of collaborative Zemo workshops capturing real life experiences and learnings from bus and commercial operators, delivering comprehensive recommendations to Government (inc. the BEIS Grid Connection roundtable) and guidance for fleets on depot-based electrification.	
Electrification of Home-Based Fleets	We've worked with energy suppliers, retailers and leading procurement officers to identify the challenges adopting EVs in home-based fleets, providing advice and guidance to Government and industry on overcoming the barriers and increasing uptake.	
Commercial EV Fleet Charging Requirements Report	Commercial fleets play a pivotal role in our economy; this report makes recommendations to Government and industry on how to accelerate their electrification, assessing and identifying the perceived barriers, potential solutions and infrastructure developments required.	
EV Smart Charging Point of Sale Consumer Advice	Concerns around ease of charging is one of the biggest barriers to EV uptake. Building upon recommendations from the Taskforce, Zemo have made proposals to Govt. on ways to increase consumer smart charging awareness and confidence throughout their purchase journey.	

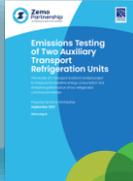
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<p><b>Fuels Working Group:</b> developing schemes and initiatives to increase the adoption of sustainable low carbon fuels, such as biofuels and renewable hydrogen.</p>		
Renewable Fuels Assurance Scheme	Zemo's pioneering new scheme has exceeded all expectations, with 85% of UK renewable fuel suppliers already members, helping fleets drive down their GHG emissions by being confident they are adopting the most sustainable low carbon fuel.	
Hydrogen Vehicle Well-to-Wheel GHG and Energy Study	New in-depth Zemo study to help policy makers better understand the emissions and efficiency of hydrogen vehicles and their potential role in future zero emission transport policy and planning.	
E10 Petrol Launch and Compatibility Checker Tool	Zemo played a pivotal role in the successful launch of E10 in the UK, bringing the fuels community collaboratively together to develop an industry-wide 'Know Your Fuel' awareness campaign; and producing an innovative online number plate E10 checker – widely adopted by industry, inc WhatCar?	
Renewable Fuels Champions Scheme	A brand new Zemo scheme designed to recognise and reward fleets that make the very best use of renewable fuels to reduce their GHG emissions. Participants have been recruited for a pilot programme starting Sept 2022.	
The Role of Hydrogen in Net Zero Transport	A multifaceted project that explores the possibilities of hydrogen, including: a detailed well-to-tank greenhouse gas emissions study; expert witness at Transport Select Committee; presentations at key IMechE and Cenex LCV events and guidance for DfT's Zero Emission Bus policy.	
Renewable Fuels Guide for Port Authorities	Authored by Zemo's Head of Sustainability, Gloria Esposito, this guide provides an overview of the low carbon liquid and gaseous fuels that could successfully replace red diesel in non-road mobile machinery at UK ports.	
Evaluation of Low Carbon Liquid Fuel Technologies	Zemo analysis for the Environment Agency evaluating and assessing the commercial potential for introducing the various low carbon liquid fuel technologies now available.	

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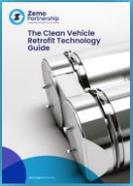
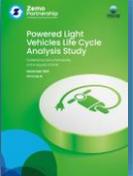
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<p><b>Bus and Coach Working Group:</b> accelerating the introduction of ultra-low and zero emission buses, working with passenger transport companies, local authorities and government</p>		
Zero Emission Bus Workshop Series	Zemo's popular series of highly engaging workshops and webinars continues, bringing the industry together to share the experiences of operators, local authorities and suppliers in overcoming the challenges of electrification.	
Zero and Ultra Low Emission Bus Certification	Zemo Partnership's flagship Zero Emission (ZEB), Ultra Low (ULEB) and Low (LEB) bus schemes continue to provide invaluable support and guidance for the bus industry, with 7 vehicles being tested and ZEB accredited this year.	
Zero Emission Bus Definition & Accreditation	Zemo is leading the way in accelerating the adoption of zero emission buses, having developed a robust accreditation process that supports Government funding schemes and ensures large well-to-wheel GHG savings.	
Market Monitoring and Developing Policy	Sitting at the heart of our ZEB /ULEB schemes, our Bus Working Group plays a pivotal role supporting Government in developing future schemes and policies; by building evidence, data and assessing the market.	
The role of GHG Life Cycle Analysis in ZE Bus Policy	Zemo are holding ongoing consultation workshops with our members, to develop an in-depth framework and recommendations for successfully integrating life cycle CO2e metrics into future zero emission bus policy.	
Zero Emission Bus Guide 2022	This invaluable guide is being fully updated to reflect the latest technologies, polios and vehicles; to provide operators and local authorities with the best solutions for reducing greenhouse gas emissions from their bus fleets.	
Delivering the All Electric Bus Towns	We've played a pivotal role supporting DfT with the development, assessment, roll-out and evaluation of this important innovative scheme; with Zemo's Bus Working Group instrumental in sharing learnings with industry.	
Accelerating the Coach Market to Zero Emissions	Zemo are committed to accelerating our coaches to zero emissions, despite the challenges; we're active members of the CPT Decarbonisation Task Force & provide rigorous evidence for ending sale of non-zero emission coaches.	

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<p><b>Commercial Vehicles Working Group:</b> for manufacturers, operators, suppliers, technical experts and all those committed to driving the transition to cleaner, greener road freight.</p>		
<p><b>Plug-in Truck Grant Proposals for Zero Emission CVs</b></p>	<p>Zemo have successfully supported a new Plug-in Truck Grant scheme by collaborating with Government and our members to develop detailed test protocols, provide ongoing technical guidance and design test certificates.</p>	
<p><b>Supporting the Zero Emission Road Freight Demonstration</b></p>	<p>Zemo has played a critical role helping secure additional £200 million funding for this emissions test programme by providing technical guidance, acting as ambassador and presenting key findings to industry and Government.</p>	
<p><b>Zero Emission Ancillaries – Developing the Evidence Base</b></p>	<p>Zemo are raising awareness and providing evidence of the impact ancillary systems have on GHG emissions, publishing a test report for Transport Scotland on the emissions performance of HGV diesel refrigeration units.</p>	
<p><b>The Freight Portal</b> <a href="http://thefreightportal.org">thefreightportal.org</a></p>	<p>Zemo played a key role developing the new Freight Portal, created by Energy Saving Trust, ourselves and DfT. This provides operators with easy to access practical advice on lowering costs and emissions, supporting Govt targets.</p>	
<p><b>Freight Emission Reduction Group Support</b></p>	<p>Zemo are providing ongoing support and guidance to DfT and industry on delivering efficiency improvements and emission reductions in HGV fleets by clearly defining targets, assessment criteria and monitoring framework.</p>	
<p><b>Supporting HGV Market Decarbonisation</b></p>	<p>Our CV working group plays a pivotal role synthesizing evidence, facilitating expert engagement and providing input and proposals to stimulate policies that encourage the introduction of low and zero emission trucks.</p>	
<p><b>Passenger Car Working Group:</b> working with manufacturers, fleet operators, suppliers, environment and consumer groups to accelerate the adoption of zero emission cars.</p>		
<p><b>Electronic Point of Sale Information for Car Buyers</b></p>	<p>A bold, far-reaching project to help consumers unravel the benefits of the latest EV, PHEV and hybrid choices by presenting the official DfT facts and figures at the digital point of sale for all new cars, giving buyers the clarity and confidence to make the right decision. Ongoing for 2022.</p>	



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<p><b>Passenger Car Working Group:</b> working with manufacturers, fleet operators, suppliers, environment and consumer groups to accelerate the adoption of zero emission cars.</p>		
Adopting Standard 'Pocket Costs'	As most new cars are acquired on finance, monthly cost is now far more relevant than the sticker price. To stimulate EV uptake, Zemo is establishing ways to embed monthly running costs within this, for all fuel types, across industry.	
Maximising PHEV Electric Miles	There's growing concern that low use of electric mode by PHEV drivers causes much higher real-world emissions. This project is building the evidence around these claims & developing proposals for overcoming any issues found.	
Creating a Code of Practice for EV Retrofit	As demand for EV retrofit options grows, so does the need for robust standards. Zemo are working with industry to identify gaps and establish a code of practice as part of the 'Zero Emission Vehicle Retrofit Accreditation Scheme'.	
<p><b>Collaborative Initiatives:</b> joint working group projects where content crosses over multiple sectors or falls outside existing work areas, overseen by the Members Council.</p>		
Clean Vehicle Retrofit Accreditation Scheme Support	We're providing ongoing support for this invaluable scheme, established by Zemo and run by EST, that gives operators and local authorities a clear understanding of retrofit technologies available to achieve CAZ standards.	
Life Cycle Analysis Webinar Series 2021-22	Zemo are at the forefront of exploring vehicle lifecycle CO <sub>2</sub> e emissions, running a series of webinars highlighting the true environmental impacts of zero emission vehicles and need to consider this within policies; 250+ attendees.	
Stimulating a UK Market for Powered Light Vehicles	Delivering on a TDP commitment and launched by Trudy Harrison MP, a Zemo & MCIA action plan for Government-industry to stimulate opportunities, initiatives and policies to drive the uptake of zero emission L-Category vehicles.	
Powered Light Vehicles Life Cycle Analysis	An exciting new Zemo study, commissioned by the MCIA, that highlights the lifecycle GHG emission savings of L-category vehicles and opportunities to decarbonise our transport by using smaller, lighter, electrified vehicles.	



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<p><b>Integration of LCA GHG Metrics into Transport Policy</b></p>	<p>To help Government develop the most effective net zero policies, we've shared our analysis on the sensitivity of WTW and LCA results to grid electricity GHG emissions factors, to highlight the necessity for consistency.</p>	
<p><b>Government Consultation Analysis &amp; Response</b></p>	<p>Reflecting Zemo's recognised experience, influence and breadth of membership, we've supported DfT and other departments providing in-depth analysis, robust interrogation and detailed responses to consultations and calls for evidence throughout the year; based upon our own expertise, member feedback and working group collaboration:</p> <ul style="list-style-type: none"> <li>🕒 DfT call for ideas: Low Carbon Fuels Strategy.</li> <li>🕒 DfT consultation: Targeting Net Zero – Next Steps for the Renewable Transport Fuels Obligation.</li> <li>🕒 BEIS call for evidence: The Role of Biomass to Achieve Net Zero.</li> <li>🕒 BEIS consultation: UK Low Carbon Hydrogen Standard.</li> <li>🕒 Transport Select Committee call for evidence: Fueling the Future, Motive Power and Connectivity.</li> <li>🕒 House of Lords Science and Technology Committee call for evidence: The Role of Batteries and Fuel Cells in Achieving Net Zero.</li> <li>🕒 Green paper on a New Road Vehicle CO<sub>2</sub> Emissions Regulatory Framework for the UK.</li> <li>🕒 DfT consultation: Phase out of the Sale of New, Non-Zero Emission Heavy Goods Vehicles.</li> </ul>	
<p><b>Transport Scotland &amp; Scottish Enterprise:</b> Zemo Partnership is playing an integral role helping to deliver Scotland's commitment to reduce transport emissions by 75% by 2030 and to a legally binding target of net-zero by 2045, by providing analysis and guidance across key areas.</p>		
<p><b>Bus Retrofit Assessment Programme</b></p>	<p>An in-depth Zemo test programme for Transport Scotland that explores how buses with retrofit equipment perform in the real world, combining in-use PEMS vehicle testing with roadside emissions monitoring and telematics data.</p>	
<p><b>Opportunities for Biomethane as a Transport Fuel</b></p>	<p>Supporting Scotland's vision for net zero transport emissions by 2045, Zemo have produced an in-depth study and report into opportunities for using biomethane as fuel for HGV and agricultural vehicles in Scotland.</p>	