

## Motorcycle Action Group (MAG) stakeholder submission to:

# Creating a plan to decarbonise transport: call for ideas

### About MAG

MAG is the UK's foremost riders' rights organisation. We have 58,000 members, and represent the interests of the motorcycling community in a rational and data-based manner. We seek to influence outcomes using logical and reasoned argument. MAG has no party political affiliations.

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### Introduction

*Motorcycle Action Group*

The Motorcycle Action Group has a long history of promoting the environmental benefits of modal shift from single occupancy cars to motorcycles. This message has been consistently resisted and/or overlooked by policy makers.

MAG is calling for the current debate over the Transport Decarbonisation Plan to throw off the prejudice and resistance, and finally embrace the benefits of motorcycling that can assist the Government in achieving its legally binding net zero emission commitment.

In our response, we show that a lack of policy to embrace, promote and develop the obvious and clear benefits of the mode have cost the nation in terms of unnecessary emissions in the past. Those unnecessary emissions - resulting from poor policy - continue today and will continue in future without a significant paradigm change in thinking. We go on to demonstrate both the short- and longer-term benefit of promoting modal shift to motorcycles. Finally, we lay out a number of ideas and opportunities to unlock the benefits that motorcycling can deliver.

The term motorcycle in this response is used to cover all conventionally recognised groupings, motorcycles, scooters and mopeds. However, we also extend the term to encompass all forms of two-wheeled motorised transport, which includes e-bikes and e-

scooters. MAG finds the hiving off of both e-bikes and e-scooters an unhelpful and unnecessary move to “reinvent the wheel”. Any vehicle with two wheels and a motor, regardless of power, capability or style, should be classed and considered as a continuum, not unnecessarily subdivided.

## **Motorcycle Tailpipe Carbon Emissions**

MAG has conducted simple analysis <sup>[1]</sup> of NAEI and DfT data that clearly shows that, on a mile for mile basis, motorcycles historically and in the present produce lower carbon emissions than cars. MAG’s analysis of the data extends to show that with declining numbers of motorcycles (due to poor policy and simple prejudice) the overall carbon emissions from transport has unnecessarily increased.

The analysis clearly shows that the fundamental concept of reducing the size and weight of the vehicle fleet currently used on the roads will, in turn, reduce carbon emissions. The direct benefit of reduced energy demand to propel a smaller vehicle also has the secondary co-benefit that reduced congestion significantly reduces emissions from other vehicles that would otherwise be idling in queues. The standard quoted study carried out by TM Leuven <sup>[2]</sup> in 2011 showed that a 10% modal shift from single occupancy cars to motorcycles would yield a 40% reduction in congestion. More recently, these results have been reinforced by studies commissioned by the Motorcycle Industry Association for its “Route To Tomorrow’s Journeys” report <sup>[3]</sup>.

As technology progresses and takes over from current fossil fuel power, the fundamental benefit accrued from smaller, lighter vehicles will continue to have great relevance. The short-sightedness of simply converting a fossil fuel powered gridlocked transport system for a zero-tailpipe emission gridlocked transport system is well established. Whether electric, synthetic fuels, hydrogen or any other propulsion method, the simple fact is that less energy is required to propel a smaller vehicle. The current thinking appears to favour battery electric vehicles (BEV’s). Battery electric motorcycles require less energy than battery electric cars. Whether BEV’s prove to be the best solution, or an alternative technology proves to outperform battery electric, the minimisation of energy required is a universal benefit, regardless of technology and propulsion method. Indeed, even in the active travel arena we need only look to the benefits of lightweight carbon fibre frames etc to see the universal truth to this concept.

## **Motorcycle Embedded Carbon Emissions**

The discussion on the TDP seems to be devoid of consideration of embedded carbon emissions from the manufacture and decommissioning of vehicles. We have searched for academic papers on this subject, but have not found one that considers the embedded emissions from motorcycle manufacture and decommissioning. Attempts to study this area for cars are limited. We must also consider the wider environmental

implications of new technologies, and we note considerable concern with battery technologies and the use of rare materials in their manufacture.

Once again, however, it would seem a fair assumption that a smaller, lighter vehicle such as a motorcycle will require less materials and energy in both their manufacture and decommissioning.

We would urge that this area of emissions attracts considerable funding for research and investigation within the TDP. We note a significant bias toward BEV's but state concern that this bias may prove unhelpful in the search for wider environmental solutions. We would discourage a TDP that closes doors to other potential solutions in favour of one preferred option. As with the ongoing resistance and prejudice against motorcycles, or previous prioritisation of diesel over petrol, for example, prejudice against other technologies and solutions could be harmful in the long term.

We have recently begun work to review the Transport Energy Model (TEM). Initial consideration of the TEM report <sup>[4]</sup> published in 2018 reveals that the model fails to make any attempt to model motorcycles and that it “does not cover emissions from the manufacture or disposal of the vehicle.”

## **Net Zero, not Zero**

In producing a decarbonisation plan we would urge the government to consider that there is a broad spectrum of views on the need, effectiveness, practicality and desirability of decarbonisation. Use of draconian and uncompromising measures will serve no purpose other than to inflame and create pushback from those at one end of that spectrum of views, just as failure to act will inflame those at the opposite end.

Absolute measures such as bans are thus counterproductive. We have covered this question in our response to the consultation on the phase-out of petrol, diesel and hybrid vehicles <sup>[5]</sup>.

The net zero commitment does not require an absolute elimination of all carbon emissions, which means that absolute bans or similar draconian enforcement of extreme lifestyle change, and erosion of perceived freedoms is both unnecessary and liable to generate resistance and pushback.

MAG's remit is not to take positions on environmental arguments, but we recognise that environmental questions and policies do impact on motorcycling. We take the position that motorcycling does, and will continue to, make a positive contribution to the overall reduction of emissions and should thus not be threatened or curtailed by environmental policies.

The reality is that motorcycling and its environmental benefits have been ignored by the non-riding public and policy makers. Therefore motorcycling, whilst remaining a legitimate transport mode, is largely the domain of enthusiasts. For this very reason the

suggestion of any threat to motorcycling in its current format (i.e. fossil fuel powered) probably meets a far higher proportion of resistance amongst motorcyclists than would otherwise be expected. This pushback from enthusiasts who are wedded to the petrol-powered internal combustion engine should not be inflamed as the proportion of carbon emissions from motorcycles is negligible in absolute terms. There is room for continued use of petrol-powered motorcycles. The TDP needs to focus on getting more car drivers to adopt motorcycling. Given that these individuals would not be enthusiasts, they will not bear the same emotional ties to any specific technology. Thus significant growth of the motorcycle sector can easily come in the form of zero emission technology that may encounter more resistance from existing motorcyclists.

MAG would suggest that the approach to entice existing motorcyclists onto zero emissions motorcycles most likely to succeed would be to provide a product that outperforms the petrol-powered equivalent at a similar price point. Alternative technology motorcycles' current, tiny share of the market is an indicator that further research and development of those technologies is urgently required and would benefit from support and investment.

It is undeniable that subsidies and support for electric motorcycles is a long way behind that for cars, demonstrating a lack of policy grasp of the universal benefit of promoting smaller vehicles. The plug-in grant for motorcycles was introduced in 2017, six years after the grant was launched for cars. This - along with the benefits of scale and investment - means that demand and supply of electric motorcycles is far behind that for cars. This has resulted in a sub-optimal position where the current thrust is to simply replace a gridlocked fossil fuel powered vehicle fleet with a gridlocked electric vehicle fleet.

Realisation of the need to solve the congestion issue has manifested in a desire to reduce private vehicle ownership and use. A policy to combine this with encouraging smaller, less congesting and polluting, vehicles is missing.

We have already proposed a weight-based approach for Vehicle Excise Duty <sup>[6]</sup>, and we now call for this approach to be applied right across the transport decarbonisation plan.

## **Multimodal society**

It is fair to say that the vast majority of individuals do not confine their travel choices to a single transport mode. Despite the noises that come from most single-mode lobby groups, the majority of travellers will use multiple transport modes, often on a single trip, based on the requirements and circumstances of the trip. Thus to consider the DTP in the context of user types would be flawed.

With specific respect to the use of motorcycles, data clearly shows that average miles travelled by motorcyclists is less than average miles travelled by car drivers. This is not an indication of a group of people who travel less, but rather a clear indicator that motorcyclists do not always see the motorcycle as the most appropriate transport mode for all trips.

Very few motorcyclists do not also own a car or, for that matter, a pedal cycle. As we have previously stated, policy does not embrace motorcycling as a positive choice, so there are bound to be barriers to these individuals that lead them to use a car over a motorcycle even when a motorcycle may be a suitable choice for that trip. This is seen in the declining numbers of individuals commuting by motorcycle.

MAG contends that these barriers that dissuade even current motorcyclists from choosing the motorcycle for some of their trips need to be removed. Key barriers include safety, insufficient fit-for-purpose secure parking, and prejudice.

## **MAG's proposals for promoting the decarbonisation of transport**

### **Drop unnecessary and confusing subdivision of the motorcycle as a vehicle class, and review regulation of the mode in order to remove barriers to entry whilst maintaining an appropriate duty of care.**

The transport regulatory review process provides an opportunity to review all aspects of regulation for all forms of motorised two-wheelers, not just e-bikes and e-scooters. MAG believes that the removal of barriers to entry to all forms of lightweight vehicles would be a key component to a decarbonisation plan. MAG believes that a licensing structure needs to be developed to allow easy entry, but equally to incentivise and encourage better training and safety standards.

MAG has responded to the Transport Regulatory Review consultation <sup>[7]</sup> but suggests that this is a vital part of the TDP.

### **Re-evaluate and promote the positive role of motorcycles.**

The TDP should have a specific strand of work to examine and quantify the benefits provided by the mode, that have hitherto been overlooked. This applies not just to the decarbonisation strand, but to the overall mode benefits. Failure to embrace the mode will prevent modal shift, which will, in turn, hinder efforts to reduce carbon emissions.

MAG's Pathways for Progress document <sup>[8]</sup> is a suitable starting point for this review.

### **Incentivise downsizing of zero emission vehicles.**

The current and future benefit of minimising the weight of materials being propelled along the road network is unquestionable. Motorcycles provide the most weight-efficient form of independent transport where trip distance makes motorisation necessary. This statement does not detract from mass transit or active travel when they are viable alternatives, but does point the way to reducing emissions from the remaining transportation needs.

MAG proposes a subsidy that applies to not just zero tailpipe emission vehicles, but also to lighter weight vehicles. This will have a dual approach where not only tailpipe

emissions, but also embedded emissions, are tackled. Grants would remain greatest for zero emissions vehicles but through a weight based VED system lightweight vehicles are further incentivised.

**Incentivise downsizing of current vehicle fleet.**

For those who cannot afford a new vehicle, the plug-in grant provides no incentive to reduce emissions.

MAG proposes an incentive that applies to existing low emission fossil fuel vehicles. An alternative incentive would be applied to 'used' vehicles to encourage the incremental reduction of the vehicle fleet mass, with the heaviest older vehicles being discouraged most. A part-exchange bonus would be applicable for trading in an old vehicle for one with lower emissions. The size of the bonus would be on a sliding scale linked to the emissions saving. For example, trading a 2 litre SUV for a 1 litre hatchback could attract a large part-exchange bonus, as could trading a 1 litre saloon car for a 500cc motorcycle. A smaller bonus could apply to trading a 2 litre saloon for a 1 litre saloon, or a 750cc motorcycle for a 250cc motorcycle. This proposal would create an incentive for all road users regardless of financial status.

Incentives for incremental improvements throughout the entire vehicle fleet are fairer than incentives applied only to new vehicles. They are likely to show a bigger short-term impact than simply incentivising buying behaviours at the front end of the sales cycle. In the longer term, gains from encouraged downsizing of vehicles achieved with existing ICE vehicles, will carry forward in the buying decisions for the zero emissions secondhand market as it develops. This will create a pull for more energy efficient, smaller zero emission vehicles from the secondhand market allied to the push of the new market.

*Motorcycle Action Group*

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