

Anna Jonsson and **Gunnar Lind**, New Weather Sweden, explain how the auto industry exaggerated the environmental benefits of hybrid cars – and how this was challenged.

n this era of climate crisis, we are surrounded by false solutions and fossil fuel companies that want to convince us that we can carry on as we are -or, at the most, only making changes that are small scratches on the surface. Marketing of products as being 'climate neutral' or 'net zero' is everywhere.

This also applies to plug-in hybrid vehicles - those that combine a fossil fuelled internal combustion engine with electric battery power. In 2021, New Weather Sweden published a report called *The great hybrid hoax*, scrutinising the plug-in hybrids that were being intensively marketed as alternatives to electric cars in Sweden. As a result, sales have rocketed in recent years, at least partly at the expense of fully electric cars that have no tail-pipe emissions. In 2015, as many plug-in hybrids as battery electric cars were sold; in 2020, more than twice as many hybrids were sold.

What appears to be a conscious greenwash strategy blurs the boundary between petrol and diesel vehicles and electric cars. We are led to believe that a plug-in hybrid is a kind of electric car and that all rechargeable cars are electric cars, all equally environmentally less destructive.

Hybrids are marketed using language and images that depict them as electrically powered. In their statistics and communication, car companies group them with battery electric cars under the category of being 'rechargeable', the auto industry's most common buzzword.

The confusion has gone so far that the term 'electric car' is now used for all kinds of hybrids and fully electric cars in both advertising and news reporting. 'Confusion marketing' is sometimes a deliberate advertising technique when lack of

clarity is beneficial in some way to the seller. The auto industry and many politicians describe hybrids as part of the solution, instead of part of the problem.

One example is the advert "Organic mobility". This was used in an ad for the Jeep Compass 4xe Plug-in Hybrid SUV. The ad was banned by the Swedish advertising ombudsman after being reported by New Weather Sweden. The advert had described, or rather claimed (or made exaggerated claims), that the car's two engines (of which one is a combustion engine and the other is electric) worked effectively together to diminish the vehicle's environmental impact (nb: circumstances differ for hybrids that are plug-in and non plug-in, that latter actually charge their batteries from energy supplied by the fossil fuel burning internal combustion engine).

One important reason for these misleading claims is that there are shortcomings in the methodology used to calculate emissions from plug-in hybrids, the Worldwide Harmonized Light Vehicles Test Procedure (WLTP). It generates unrealistically low emission figures that are used both by manufacturers and authorities. In this way, plug-in hybrids are often reported to have 70–80% lower emissions than the same cars without charging technology. In a positive step, since New Weather's report on the subject, this system has now been updated, with the intention of reducing these problems.

However, independent studies showed that actual emissions were much higher than indicated. According to these, a Volvo V60, for example, emitted 122 grams of carbon dioxide per kilometre, not 41 grams as stated by the WLTP.



Table 1. New car sales in Sweden 2015–2022 and share of plug-in hybrids and electric cars, %. (2022 figures are for January–September only.)

	Total	Plug-in	Electric
2015	344,968	0.1	0.1
2016	372,287	0.2	0.1
2017	379,292	4.0	1.1
2018	353,692	6.1	1.9
2019	356,013	7.1	4.4
2020	292,024	22.7	9.6
2021	301,006	26.0	19.0
2022	204,640	23.0	28 .0

Anna Jonsson and **Gunnar Lind** are co-directors of New Weather Sweden, an independent think tank twinned with the New Weather Institute in the UK.

Reference: The great hybrid hoax: the case for a Swedish ban on cars with internal combustion engines and their advertising published by New Weather Sweden – https://www.badvertising.se/s/Badvertising-UK-23.pdf

This article is based on a presentation given at the Responsible Science conference in October 2022.

When plug-in hybrids are equated with battery electric cars in terms of environmental performance, it is easy for the consumer to choose the hybrid, which is significantly cheaper and has a longer range. This slows down vehicle improvement and delays the transition of the transport sector to more efficient cars with zero tailpipe emissions.

Politicians have been quick to embrace these fake electric cars, costing the state large sums of money. The low emission figures given for plug-in hybrids, according to the WLTP, entitle them to large climate bonuses.

In 2020, the Swedish government paid out at least 1 billion krona (approximately £840 million) in bonuses to encourage the purchase of plug-in hybrids which, according to independent studies, emit more greenhouse gases than the EU average for new cars. If robust emission figures had been used, only a few plug-in hybrids would have qualified for subsidies under the Swedish bonus scheme; most such vehicles would instead cause owners to pay increased taxes.

The problem is compounded by the auto industry's often cynical and irresponsible marketing of plug-in hybrids. Part of it is potentially illegal, since it misleads the consumer into believing that plug-in hybrids are comparable to electric cars.

But there is some good news since the report was published by New Weather Sweden. The WLTP system has now been updated. And it also seems like the big increase in sales of plug in hybrids has eased. Figures of car sales in Sweden in 2022 (at the time of writing – see Table 1) show that the share of new electric cars is now bigger than the share of hybrids.

These latest figures show that the great hybrid hoax may have passed its peak. But still the marketing of false solutions and misleading ads surround us, and hybrids are still promoted. Therefore legislation and regulations must be amended to stop the advertising for products that wreck Earth's climate, including plug-in hybrids and other cars with internal combustion engines. In the meantime, the media need to take responsibility for the accuracy of what they convey in their advertisements and news stories and features.