

# Winter Services: Minimising the Environmental Impact

It's obvious the future will see a phasing out of fossil fuel vehicles in favour of more efficient vehicles.

The car market is already awash with electric vehicles that perform well in the real world and soon, the choices will begin to extend into the commercial vehicle sector.

In readiness for this sea-change, Mitie has already committed to move 20% of its fleet to electric by 2020 with an aim of full electrification by 2030.

Given that its fleet is responsible for 93% of its carbon emissions, Mitie's transition to electric vehicles will have a dramatic impact on its carbon footprint – the 20% by 2020 commitment alone will save 4,000 tonnes of CO<sub>2</sub> a year. Mitie also recently joined EV100, pledging to fully electrify its fleet by 2030\*.

But, for now, and probably for the next few years, the UK's Winter Gritting industry will still need to rely on fossil fuels to power its Gritting vehicles. There are two main reasons for this. Power; the weight of salt requires some significant energy to move it around and distance; the distance that can be travelled carrying this weight. Until these limiting factors are addressed, fossil fuels seem to be the only option.

But that doesn't mean the Winter Gritting industry can't play its part in reducing carbon emissions.

First of all, we must split the winter gritting industry into two parts... Highway Gritting and Site Gritting.



The Highway gritting sector is something we're all familiar with; Highway, and Local Authorities using huge HGV gritting lorries to treat thousands of miles right across the UK's road network. These vehicles are perfectly suited to road gritting and will, most likely be the last vehicles that find their way to an eclectic alternative.

Whilst these gas-guzzling behemoths with their single-digit fuel consumption and mind-boggling CO<sub>2</sub> emissions (up to 1,000g/km @50 mph) might be the best option in a highway environment (where they will be gritting for more than 80% of their journey), they are far less suited to site gritting.

Site gritting (Gritting business premises), has changed enormously over the last decade. Once home to a rag-tag collection of non-specialists with shovels, the industry is now driven by a handful of specialists with the very latest hi-tech vehicles and technology. Specially designed light commercial vehicles equipped with super-efficient gritting hoppers are now the standard. These vehicles are much more efficient and the process far more of a surgical strike.

Richard Hughes, Mitie's Head of Winter Services has made a life-long career of site-gritting and offers some valuable insights into the state-of-the-nation and where he sees the future of the industry.

“Using highway style gritting vehicles for site gritting is probably the single biggest contributor to the industry's carbon footprint.” said Richard. “Where Highway Gritters are designed to be gritting for 80% of their journey, the site gritting sector spends less than 10% of their journey gritting. Most of our journey is spent travelling between sites like supermarket car parks, doctors' surgeries and retail parks. Obviously, we want to find the most efficient way of doing this.”

Modern light commercial vehicles are very efficient and, when combined with the latest gritting hopper technology, these vehicles can service a large number of sites between re-fills of salt. For example, one of our



vehicles can cover around 5 miles of road between re-fills and, in doing so gets around 35mpg with CO2 emissions of less than 213 g/km. All in all, these specialist vehicles use less than 25% of the fuel used by a highway-style gritter and push out around 20% of the CO2 emissions.”

It's clear that, while we're probably going to have to wait for gritting industry to move to electric, there's still much that can be done in the site-gritting sector to reduce its carbon footprint.