

Case Study: Norwich Low Emission Zone

Emissions Reduction Technology to meet NOx targets

Demonstrating its commitment to improving air quality in Norwich, Norfolk County Council introduced the Norwich Low Emission Zone (LEZ) in July 2008. The aim is to ensure that 'captive fleets,' or buses, which spend a large proportion of time within the city centre, emit low levels of harmful pollutants such as oxides of nitrogen (NOx). The LEZ, established with Norwich City Council under the EU-backed CIVITAS initiative for cleaner and better transport in cities, requires that 70% of city buses must now meet specified emissions levels for NOx; which can cause inflammation of the lungs and lower resistance to respiratory infections. This will rise to 100% from April 2010.

In order to meet the requirements of the new LEZ, buses need to meet the Euro 3 emissions standard, and those manufactured after 2001 will already meet this standard. Replacing all older vehicles would have been prohibitively expensive, so the Council worked with bus operator First Eastern Counties and consultant partner Mott MacDonald to identify an alternative that would deliver the same improved air quality standard at a lower cost.

It was identified that older buses, those manufactured to Euro 2 standard, could be fitted with SCR (Selective Catalytic Reduction) technology to reduce NOx emissions. First Eastern Counties selected SCR technology from Eminox, the UK's principal manufacturer of purpose-designed exhausts and emission control systems for commercial vehicles. Eminox SCR technology delivers NOx reductions of up to 64%; well within the level required to enable a Euro II vehicle to comply with the Norwich LEZ standards.

Eminox initially fitted their SCR system to 15 First Eastern Counties Scania Euro 2 vehicles to coincide with a planned fleet refurbishment. A further five buses have been fitted with the Eminox system this year and the Council is on target to have all buses in Norwich compliant to Euro 3 standard by 2010.

"Reducing emissions from transport and improving local air quality in line with National Air Quality Standards are key objectives in Norfolk's Local Transport Plan," said Mike Payne, Project Manager for Norfolk County Council. "That's why we have provided funding contributions of over £150,000 to help reduce NOx emissions from older buses operating in Norwich."

As the UK's leading emissions specialist, Eminox offers market-leading emission control systems and is the leading compliance solution for the London Low Emission Zone (LEZ) and a growing number of E-Zones across Europe.

