



EURO  
CITIES



## Edinburgh's energy efficient buses

### 'Auld but not Reekie'

The smoking chimneys that gave the city this nickname have long disappeared but Edinburgh is still widely and affectionately known as Auld Reekie, a Scots dialect term meaning Old Smokey.

It is a fitting name for an initiative intended to reduce pollution from energy use on Edinburgh's public bus network.

Lothian Buses is the main bus operator in Edinburgh, and is majority owned by City of Edinburgh Council, making it the largest municipal bus company in Britain. The company operates a fleet of over 700 buses, which carried 118,400,000 passengers in 2014.

### An environmentally friendly bus fleet

As part of an ongoing strategy to reduce pollution in Edinburgh and its surrounding districts, Lothian Buses has invested substantially in measures to decrease the environmental impact of its fleet, helping to meet the City of Edinburgh Council's commitment to cut carbon emissions by 42% by 2020.

Lothian Buses worked with Volvo over four years to bring hybrid bus technology to Scotland. Hybrid buses are powered by a combination of battery and diesel, which runs more efficiently, smoothly and quietly than traditional bus engines.

The first 15 hybrid buses in Edinburgh went into service in 2011 on one of the city's busiest commuter routes. These buses operate with 35% lower fuel consumption, equating to a carbon reduction of 600 tonnes per year on this route alone.

By the end of 2014, Lothian buses had 65 hybrid buses in service, operating across Edinburgh's highest pollution areas, with 20 new double decker hybrid buses on order.



Probably the most forward looking bus company on the globe.



**Volvo Company**

cities in action

March 2015

where: Edinburgh, UK  
what: mobility, environment  
when: 2015+

## Making 'auld' buses less 'reekie'

Lothian Buses has pioneered the use of selective catalytic reduction technology (SCRT) to reduce exhaust emissions from older buses.

Following successful trials, 45 buses were fitted with SCRT exhausts and have achieved dramatic improvements in air quality, including a 70% reduction in nitrogen oxides, the air pollutants of most concern in Edinburgh, and a 99% reduction in other air pollutants.

## Encouraging car drivers to take the bus

One of Edinburgh's central goals is to reduce the passenger carbon footprint by encouraging a shift from car to bus use.

Every step of the Auld but not Reekie initiative has considered how to achieve this; from the executive design of the hybrid buses, with free on board wi-fi, to promoting the environmentally friendly buses through high profile launch events and door to door leafleting.

The results have been tremendously successful, with a 10-13% rise in passenger numbers on the hybrid bus routes.

Over 90% of Edinburgh's bus users are pleased with the new buses, and Lothian Buses has received numerous requests for additional routes to adopt the hybrid vehicles.

## What next?

The Auld but not Reekie initiative is open-ended.

Lothian Buses is constantly looking for innovations in technology to lower environmental impacts.

The environmental improvements continue to accumulate, with annual reductions of 1,200 tonnes in carbon emissions, 9.6 tonnes in nitrogen emissions and 184kg in PM10 emissions.

With these results, Edinburgh is rapidly becoming ever less the Auld Reekie place it used to be.



Lothian Buses is committed to providing a greener and more sustainable travel offering to our passengers and to the local environment. We have heavily invested in our fleet and seen substantial savings in fuel consumption and corresponding carbon reductions. This is an ongoing journey to ensure that we provide the most modern and environmentally efficient vehicles for Edinburgh's travelling public.

**Emma Roy,**  
**environmental officer, Lothian Buses**

