



## Challenge

First wanted to reduce fuel consumption, enhance safety and improve passenger comfort.

## Solution

Deployment of GreenRoad's service across First's UK bus fleet of 9,000 vehicles.

## Results

- 70% decrease in the number of unnecessary driving maneuvers
- 5% improvement in fuel-efficiency
- Anticipates meeting its goal of significantly reducing its CO2 emissions over three years.
- 8.4% reduction in passenger injuries
- 6.3% reduction in collisions

*"The great thing about this project is that our drivers are the ones who can make a significant difference and they are real 'green' champions. By changing their driving habits by just a small fraction the gains in terms of environmental efficiency are huge, as well as in areas such as the cost of fuel to the business and the safety and comfort of our passengers."*

— Graham Belgium, Business Improvement Director for First Bus



## FirstGroup Focuses on Environment, Safety and Passenger Comfort

FirstGroup, the world's largest bus operator, decided to roll out the GreenRoad driver coaching service to its fleet of 9,000 buses in the UK and Ireland after a trial of the service showed a significant decrease in emissions and unnecessary driving maneuvers.

*"We have seen a 70% reduction in risky maneuvers as well as improvements in passenger comfort and a reduction in small collisions. We have also achieved like-for-like fuel efficiency improvements of 5%."*

— Graham Belgium, Business Improvement Director for First UK Bus

## Background

For any bus operator, the ability to drive more economically, safely and smoothly benefits not only the company but also its passengers. As the UK's largest bus operator, First believes it has a responsibility to lead the market in making its fleet the most fuel efficient and the safest in the UK. By rolling out the GreenRoad Service, branded "DriveGreen" across its national fleet, First anticipates meeting its goal of reducing its CO2 emissions by 100,000 tons.

GreenRoad's service focuses on the one factor that has the greatest impact on fuel consumption and CO2 emissions – the driver. Research shows that driving decisions are responsible for up to 33 percent of fuel spend. By enabling better decisions, GreenRoad improves fuel consumption, operational efficiency, vehicle wear-and-tear & lowers insurance costs.

GreenRoad provides drivers and fleet managers with real-time, comprehensive

feedback, online reporting, analysis and coaching on their abilities, maneuvers and patterns. GreenRoad positively impacts both conscious and unconscious driving behavior – the key to creating more fuel-efficient drivers.

GreenRoad continuously measures those maneuvers that most impact safe driving, fuel efficiency and emissions. Green, amber and red lights in the cab give drivers an instant indication of the nature of their acceleration, braking and maneuvering. On returning from routes, drivers and depot managers can view online the overall quality of their driving. A score is allocated to each driving session, giving drivers the opportunity to improve their driving and help play their part in tackling environmental issues.

First and GreenRoad worked together to ensure that drivers understood that DriveGreen was beneficial to them and empowered them to their job better and more environmentally-friendly. Indeed, the drivers' unions have seen the benefits of

## Recognition

scottish  
transport awards



- Scottish Transport Awards – Sustainable Transport
- Green Transport Awards – Best Green Operator
- Mayor of London's Green 500 Platinum Award

To find out more about GreenRoad, please contact:

[www.greenroad.com](http://www.greenroad.com)

[info@greenroad.com](mailto:info@greenroad.com)

### UK Offices:

The Podium  
1 Eversholt Street  
London | NW1 2DN  
+44 (0) 20 7886 0831

### U.S. Headquarters:

3 Twin Dolphin Drive Suite 300  
Redwood Shores, CA 94065  
+1 650 551 1530

the system. Jimmy Burroughs, spokesman for the Unite Union, said: "This will improve the working environment of the drivers. Any system that helps a driver to self-assess and improve is a benefit."

## Results

The nationwide roll out to the entire fleet of 9,000 buses reported a 70% decrease in the number of risky maneuvers, proven to affect fuel efficiency and the smoothness of the ride. The driving has dropped from an average of nearly 80 risky maneuvers per 10 hours in 2009 down to an average of 26 at the end of 2010 – a drop of nearly 70%.

Because they are driving with greater attention, drivers are using less fuel and lowering emissions, to the point where First believes it is possible to hit its three-year target of reducing emissions.

"This is a significant step in our efforts to improve the comfort and safety of our bus services as well as making a real environmental difference for future generations," said Belgium. "The great thing is that our drivers are the ones who can make a significant difference - they are real 'green' champions. Changing their driving habits by a small fraction results in huge environmental efficiencies, lower cost of fuel and greater safety and comfort for our passengers."

For passengers, there is the obvious benefit of increasingly smooth and comfortable journeys. Smoother driving also means better fuel economy, especially in a large vehicle such as a bus in which keeping momentum constant is vital for efficiency. And better fuel economy means lower operating costs, which helps keep fares down.

### About First Group

**Industry:** Transport Operator  
**Headquarters:** United Kingdom

**Description:** FirstGroup plc is the world's leading transport operator with revenues of over £6 billion. It employs some 136,000 staff throughout the UK and North America and transports more than 2.5 billion passengers a year. FirstGroup is Britain's largest bus operator, running more than one in five of all local bus services and carrying 3 million passengers a day in more than 40 major towns and cities. FirstGroup is the leader in safe, reliable, innovative and sustainable transport services - global in scale and local in approach.

Clare Dalton, staff manager for the Swansea division of First Cymru, exclaims, "DriveGreen has made my, and my colleagues', jobs easier with a notable reduction in customer complaints, passenger injuries and collisions involving our vehicles. When

there is an incident we now also have the DriveGreen data to look at; the ability to do that played a significant role in a recent investigation, and helped prove a driver was not to blame, effectively helping to save his job."

Two drivers on her team achieved perfect scores of zero for eight weeks meaning they have not had a single risky driving maneuver. They were both awarded a £50 DriveGreen bonus in recognition of their achievements, which kick started a competitive environment incentivizing other drivers to also try to reach this elusive goal.

Graham Belgium, commented, "As the project has rolled out nationally we have been pleased to see drivers getting thoroughly involved and checking their Safety Scores. We have seen a 70% reduction in risky maneuvers as well as improvements in passenger comfort and a reduction in small accidents and collisions."

## Future Plans

"The drivers are very enthusiastic about being empowered to help protect the environment," continued Belgium. "We are encouraging them to provide feedback so we can continue to evolve, innovate and enhance the service. To give further incentive, we have started to reward drivers who achieve and maintain the highest standards of driving over the next few years from a pot of £2 million."