



## VanBestPractice

### Fuel Management Pack

A Step-by-step Guide to Managing Your Fuel Use



Fuel Management Pack - A Step-by-step Guide to Managing Fuel Use



Fuel Management Pack



Safe Vans



Case Studies



Efficient Vans



Carrying Goods Safely



Driver Essentials



Van Specification

VBP1001 October 2009

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The Van Best Practice programme is funded by the Department for Transport and managed by AEA to promote and improve operational efficiency within van operations in England. The Van Best Practice programme offers FREE essential information and advice for van users, covering topics such as operational efficiency, driver management, safety, saving fuel and performance management.

#### Summary

- This guide will take van operators through a step-by-step process of managing their fuel consumption more effectively
- This will reduce costs, reduce damage to the environment, improve driving behaviour and help to deliver a better customer service
- The necessary steps have been set out in three Action Sheets, and three Follow-on Sheets
- A PC-based Fuel Efficiency calculator can be downloaded from the Van Best Practice website

#### Fuel Efficiency Calculator

In order for any fuel efficiency improvement to be undertaken by a van operator, they must put in place a fuel management system to record fuel usage (see Action Sheet 3). The Van Best Practice programme has developed a simple tool that can be used to calculate fuel efficiency and this is available through the website. This is a Microsoft Excel Spreadsheet compatible tool that is simple to use and comes complete with integrated user instructions.

## Guide Aim

This guide provides step-by-step actions that a van operator can take in order to implement or improve their vehicle fuel efficiency.

### The Target Audience

This guide has been produced for use by van operators within any type of business; whether vans are used as the business's primary revenue, such as distribution, or as a support tool for another trade. The guide has not been written with any upper limits specifically in mind, but it is aimed at van users who do not necessarily see themselves as a large fleet. It has some useful information that is of benefit to sole traders running just one or a few vans.

Those managing a very large fleet may well wish to also refer to the Department for Transport's Freight Best Practice Fuel Management Guide.

### Benefits of Fuel Management

There are a number of benefits associated with greater fuel efficiency. These are primarily a reduction in costs to the van operator; a reduction of carbon dioxide (CO<sub>2</sub>) and other emissions; improved safety resulting from improved driving style; and an increase in customer satisfaction.

#### Costs

The cost of fuel has always been a significant expenditure for van operators and this has been highlighted by fluctuations in the price of fuel. Subsequently, many van operators have focused their attention on exploring opportunities to reduce this operating cost and to no longer accept expenditure on fuel without challenging their own fuel efficiency and ability to improve.

#### Environment

Government targets to reduce CO<sub>2</sub> and other harmful emissions are well publicised. In addition, many businesses are putting effort in to their response to demands of Corporate Social Responsibility. Improvement in van fuel efficiency will contribute to this goal.

#### Safety

Many of the activities associated with fuel efficiency have a positive effect on driving style, which in turn has the positive effect of safer driving and working practices. Safe and Fuel Efficient Driving (SAFED) for Vans is an example and is strongly recommended as a means to increase van fuel efficiency and safety.

#### Customer Satisfaction

Fuel efficiency contributes towards more reliable van operations that have the added benefits of better resource utilisation and reliability; this all aids improvement in service and customer satisfaction.

### How to Use the Guide

To enable fuel efficiency to be implemented more effectively, the actions required have been divided into a series of Action Sheets and Follow-on Sheets in this guide. Each sheet provides step-by-step advice and direction to users. They also give advice on a different aspect of fuel management and achieving efficiency. The sheets are not designed to all be used simultaneously as this could result in an unfocused or disjointed approach.

Each Action Sheet has been divided into Basic Steps and Advanced Steps. It is recommended that van users implement the Action Sheet Basic Steps first. Once they are satisfied that these measures are in force, they should move on to the Action Sheet Advanced Steps and start to undertake the Follow-on steps.

The diagram opposite shows the suggested sequence of usage.

### Action and Follow-on Sheets

#### Action Sheets

1. Management: Initiating the Change
2. Driving the Change: the Role of the Fuel Champion
3. Improving Miles Per Gallon Performance

#### Follow-on Sheets

The Driver  
The Vehicle  
The Journey

Each sheet advises at what stage users should begin the actions described and makes cross reference to other sheets and Van Best Practice products.

The sheets are designed to be used either individually or together in the workplace and have the facility for the steps to be 'ticked off' as completed – acting as a progress or check list.



# Action Sheet 1

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## Management: Initiating the Change

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### Introduction

Let's consider the following scenario. If an average small van costs £3,000 per year to fill up and there are 20 vans on the fleet, that is a total annual fuel bill of £60,000. How much would you want to manage and reduce this?

The start point of a fuel management programme has to be the basic decision to manage this critical component of cost more effectively.

In order for fuel efficiency to become a routine part of the van users' everyday activity, it needs to be supported throughout the business. Without this, initiatives are likely to fail. If fuel efficiency is not seen to be part of the company's routine way of doing business, changes will need to be made.

This Action Sheet sets out how to achieve fuel efficiency buy-in.

### Sequence

Initiating the change is a priority activity that has to be undertaken in order to improve fuel efficiency within a van operation. The Basic Steps, as shown overleaf, must be completed before moving on to the next Action Sheet.

### Responsible Person

In order for fuel efficiency to be initiated, the business managers need to be convinced of the benefits to the company. The decision to embark on fuel efficiency could come from a variety of people within any management structure. Whoever decides that fuel efficiency needs to be taken seriously and to change procedures to ensure that action is taken, must have senior management support before starting.

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**Basic Steps****1 Agreeing a fuel efficiency policy**

Agree a fuel efficiency policy, including any goals and objectives. This will involve changes that need to be thought through, such as the requirement to measure fuel usage accurately.

**2 Gaining commitment**

Fuel efficiency requires commitment throughout the business, so ensure that everyone is briefed on the implementation of fuel efficiency measures. Win people over by delivering the message in an encouraging style.

**3 Justifying improvements**

It may be necessary to justify implementation of fuel management improvements, especially if expenditure is required. In the first instance, recording mileage and measuring fuel usage will require time and effort.

**4 Selecting a Fuel Champion**

Select a person in the business to lead the change; this person is normally referred to as the 'Fuel Champion' (see Action Sheet 2). Without an appointed person to lead and manage fuel efficiency, it is less likely to succeed.

**5 Publicising internally**

Publicise fuel management internally within the business to all levels of management and the workforce and ensure that the benefits are clear.

**Advanced Steps****1 Considering additional resources**

Consider any additional resources required to continue improvements in fuel efficiency. This may include telematics or other automated fuel and/or vehicle performance measuring equipment.

**2 Continuing performance review**

Continue to periodically review performance; setting new targets once original ones have been met. This should be undertaken at least annually and should always be realistic. As the benefits of fuel efficiency grow, the review will become part of business practice and could include many people within the business.



# Action Sheet 2

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## Driving the Change: the Role of the Fuel Champion

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### **Introduction**

The Fuel Champion will, on a day-to-day basis, drive forward the fuel efficiency initiative. It is often a manager or supervisor within the business, but for smaller operations, can be a member of the workforce, as long as they have the backing and support to carry out the job. This appointment will very much depend on the size of the business and management structure it may have.

Overleaf, it sets out the actions that a Fuel Champion needs to undertake in order to successfully introduce and implement effective fuel management.

### **Sequence**

This is an action that is required to be undertaken once the Basic Steps of Action Sheet 1 have been established.

### **Responsible Person**

The selection of a Fuel Champion is critical to the success of any fuel efficiency effort. The exact selection for this role depends on many factors, such as van numbers and individual personal skills. This person should be appointed and supported by senior management.

**Basic Steps****1 Establishing the performance baseline**

One of the first tasks should be to establish performance monitoring to find out the business's current fuel usage. There are a number of ways to achieve this and they will primarily depend on the number of vans and the administration infrastructure. (See Action Sheet 3)

**2 Establishing performance monitoring**

In order to monitor performance, you need to record the van registration, mileage at fill up, driver identification, fuel volume at fill up and the date of the fill up. The Van Best Practice programme has produced a simple PC-based, fuel performance calculator to assist with this and it is suitable for up to 25 vans. It is available through the Van Best Practice website.

**3 Setting indicators and targets**

Once the baseline is established, the Fuel Champion must set some simple indicators and improvement targets, for example, improvement of MPG by 10%.

This will depend on how quickly data is available to the Fuel Champion.

**4 Communicating results**

In order to secure and maintain commitment, communication is key. It must be sold as a positive step that is going to benefit everyone employed by the business and must not come across as a management only activity.

Fuel efficiency will be achieved through changing driver behaviour and better use of vehicles, therefore, communication is vital.

**Advanced Steps****1 Reviewing strategy**

The Fuel Champion will need to continually review performance improvements and might consider actions such as driver training and technology aids e.g. telematics.

**2 Maintaining communication**

There is a need to communicate the improvements within the business and to continue to engage everyone in fuel efficiency. There may be novel and interesting approaches to use, such as having an internal competition.



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# Action Sheet 3

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## Improving Miles Per Gallon (MPG) Performance

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### Introduction

Improving MPG will mean you get more miles from each tank of fuel. You will achieve this by focussing on the vehicle, driver and the journeys.

There are therefore five pieces of information that need to be collected at every transaction:

- Date of fuelling
- Vehicle identification
- Driver identification
- Litres of fuel drawn
- Record of miles since last refill – odometer reading

For sole traders and small and medium enterprises (SMEs), the Van Best Practice programme has produced a simple fuel performance and efficiency calculator which has the facility to record this data and undertake

calculations automatically. It is available through the Van Best Practice website.

For organisations that use fuel cards to purchase fuel, this information may well be available through fuel card management reports. However, the accuracy of the information supplied must be high (especially mileage at the time of refuelling) for this method of data capture to be useful.

### Sequence

This is an action that is required to be undertaken at the start of any fuel efficiency initiative, once a Fuel Champion has been selected and the new procedures communicated within the organisation.

### Responsible Person

The activity is the responsibility of the Fuel Champion.

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**Basic Steps****1 Collecting data**

It is critical to capture and record the fuel related information for each van. This can only be achieved by setting up a data collection process that includes the five points listed in the introduction of this Action Sheet. The information can be captured through a variety of means, all of which involve accurate logging of data by drivers. The Fuel Champion must determine a way of doing this that suits the operation.

As targets are achieved, drivers can be involved in the reassessment and promotion of fresh targets.

**2 Calculating individual van MPG**

Once a data capture process has been put in place, the information must be calculated in MPG. This needs to be calculated down to individual van level.

**3 Establishing van MPG baselines**

Once individual van MPG has been calculated, the next step is to establish either the baseline or a series of baselines for different profile vans. This can be done by a variety of different groups, for example, by van type or route type. This will give the Fuel Champion a series of baselines that they can use to set realistic targets. When calculating average MPG, every calculation must be made separately. For example, do not calculate the average MPG for all vans using the individual van average MPG figures, it must be calculated using the total sums of fuel used against total miles driven for all vans.

**4 Identifying exceptions**

Once the baseline is determined, the Fuel Champion can then identify the high and low consumptions in terms of MPG. These may indicate a variety of factors such as an inappropriate van being used for a specific task, or highlight a driving skills issue. They may also identify some good driver practices that are worthy of being shared.

**Advanced Steps****1 Evaluating data collection technology**

With data collected, the Fuel Champion can conduct a cost benefit analysis of using electronic data collection if this is currently being collected manually. This can reduce employee time spent on data collection and some systems (telematics) can give a greater level of driving detail, such as speed and harsh braking/acceleration.

**2 Improving performance**

Robust and long term collection of accurate data will allow ever greater opportunities for the Fuel Champion to identify initiatives to improve fuel performance. These will always be found under the following classifications:

- Vehicle
- Driver
- Journey

This will allow for targeted action in each of these areas, more details of which will be found in the Follow-on Sheets.



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# Follow-on Sheet: The Driver

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## **Introduction**

The Fuel Champion must emphasise the importance of establishing baseline data to drivers as without this, the starting point from which improvement has to be made, will never be known. The baseline is created from all activities carried out as per Action Sheet 3.

In order for fuel efficiency measures to be effective, the business must engage van drivers, whether they drive professionally or drive a van to support another trade. Driver behaviour is a key factor in fuel efficiency, so they must be motivated and supported for the initiative to be successful.

## **Sequence**

This is a priority action that is required to be undertaken at the start of any fuel efficiency measure.

## **Responsible Person**

The activity is the responsibility of the Fuel Champion.

# The Driver

Date  
Completed

## 1 Driver development

The Fuel Champion must emphasise the importance of establishing baseline data to drivers, as without this, the starting point from which improvement has to be made, will never be known. Feedback, individually or as part of a group, can take a variety of forms. The Van Best Practice programme has developed a range of tip cards called 'Driver Essentials' which may be useful.

To ensure that drivers play a full role in fuel efficiency, they need to be informed of action and progress. Internal communication can take the form of a variety of actions, including verbal briefings, posters or newsletters.

## 2 Data collection

There may be real or perceived problems with drivers' ability to collect and provide data. These must be investigated by the Fuel Champion, giving credence to driver issues and agreeing solutions.

## 3 Recruiting

Fuel efficiency should be introduced in the recruitment assessment of van drivers, either through interview and/or a practical driving assessment.

New drivers should be briefed on the business's fuel efficiency measures and on their expected role.

## 4 Positive recognition

Once improvements have begun, recognition of positive driver performance should be made. The Fuel Champion could consider the possible introduction of incentive schemes for fuel efficiency, but needs to be aware that these must be fair, not subject to manipulation, and should not encourage illegal behaviours, e.g. speeding, unsafe loading.



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# Follow-on Sheet: The Vehicle

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## **Introduction**

Making sure you bring the right vehicles into the fleet and getting the most out of the ones you currently have are of key importance. For these, your findings will be aided by and based upon the data you have collected as per Action Sheet 3.

Key areas to consider are:

- Van specification
- Daily vehicle checks
- Servicing and maintenance
- Associated equipment

## **Sequence**

This is a follow-on activity that should be examined once fuel efficiency measures have been put in place and the Fuel Champion has established fuel usage indicators and trends. A good time to start this activity would be once the Basic Steps of all the Action Sheets have been implemented.

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## **Responsible Person**

This sheet is aimed at a variety of users, namely operations and maintenance managers. The number of people involved will be determined by the number of vans in the business. However, this activity will be of interest to, and will involve, the Fuel Champion.

# The Vehicle

Date Completed

## 1 Van specification

It is important to 'right size' the vans to each particular task to ensure the most appropriate and, therefore, efficient van is selected.

If similar tasks are being carried out by different vans, this should be investigated to highlight if one or more types are better suited, with a view of making changes to vehicle specification or allocation.

Further information on van specification can be found in the Van Best Practice 'Van Specification' guide.

## 2 Driver care and attention

Drivers should carry out routine checks on vans to ensure they continue to be roadworthy and any vehicle issues are highlighted early.

Some companies have ensured these happen by conducting on-the-spot checks, asking employees to confirm their compliance when claiming monthly expenses, or making the failure to carry them out a disciplinary matter.

The Van Best Practice programme has developed a range of tip cards called 'Driver Essentials' which may be useful.

## 3 Linking fuel efficiency with maintenance

Keeping vans properly maintained and roadworthy is an important aspect of management because of the costs involved and the road safety implications. There is also an important environmental aspect to this – a well-maintained van will generally use less fuel and produce lower emissions than one that is not properly maintained.

It is therefore important to include the investigation of poor performing vans as part of the fuel efficiency monitoring process.

## 4 Contributing knowledge

As part of the Fuel Champion's responsibility for involving all staff in fuel efficiency (see Action Sheet 2), maintenance staff should be asked to contribute their knowledge on van fuel efficiency.

## 5 Whole-life costs

The best way to understand and control van expenditure is through the process known as whole-life costs. This provides the most accurate way to predict the overall costs of the vans to the business.

In general, the major elements are depreciation, fuel, funding costs, maintenance, insurance and vehicle excise duty.

When renewing vans it is important to understand the whole-life costs rather than the cash price or monthly lease.



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# Follow-on Sheet: The Journey

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## **Introduction**

As a business makes progress with fuel efficiency, has established fuel usage and begun to implement improvements, one of the more advanced options is to explore the routes and schedules used by its vans.

Using the data collected (see Action Sheet 3), businesses should analyse their vehicle performance against manufacturers' figures (where available). This will give a good 'rough and ready' indication of how well vans are performing against an expected MPG.

## **Sequence**

This is for use in a business once the Basic Steps of Action Sheets 1 to 3 have been carried out. It is strongly advised to have established a fuel consumption baseline before embarking on this activity.

## **Responsible Person**

This sheet is for operations managers and Fuel Champions to help them to investigate the most appropriate routes and times for van usage and therefore contribute to the improvement of fuel consumption.

# The Journey

Date  
Completed

## 1 Analysing routes and journeys

As part of the analysis of MPG (see Action Sheet 3), the performances of different routes and journey timing variances should be identified.

## 2 Scheduling

It is important to ask the question: "Are all journeys required?".  
If the answer to this is 'no', could some be combined?

Changes in the schedule or timing of deliveries can reduce your environmental impact without impacting upon your overall business performance.

## 3 Trialling alternative routes

The Fuel Champion should investigate alternative routes and times of the day as an option and analyse trial outputs to determine if the alterations improve fuel efficiency.

## 4 Evaluating software

There are a variety of office and in-van software tools available to van users that can effectively map the fuel efficiency of journeys.

The Fuel Champion should conduct a cost benefit analysis on their potential fuel savings, remembering added benefits such as real time visibility and driver performance, that some systems provide.

## 5 Analysing customers and associated routes

Over time it is recommended that a business should undertake an analysis of their customers (whether new or existing), the associated journeys and contract value.

The results of such an analysis will enable the business to understand whether particular customers are costing you more in transport costs than the associated contract value.