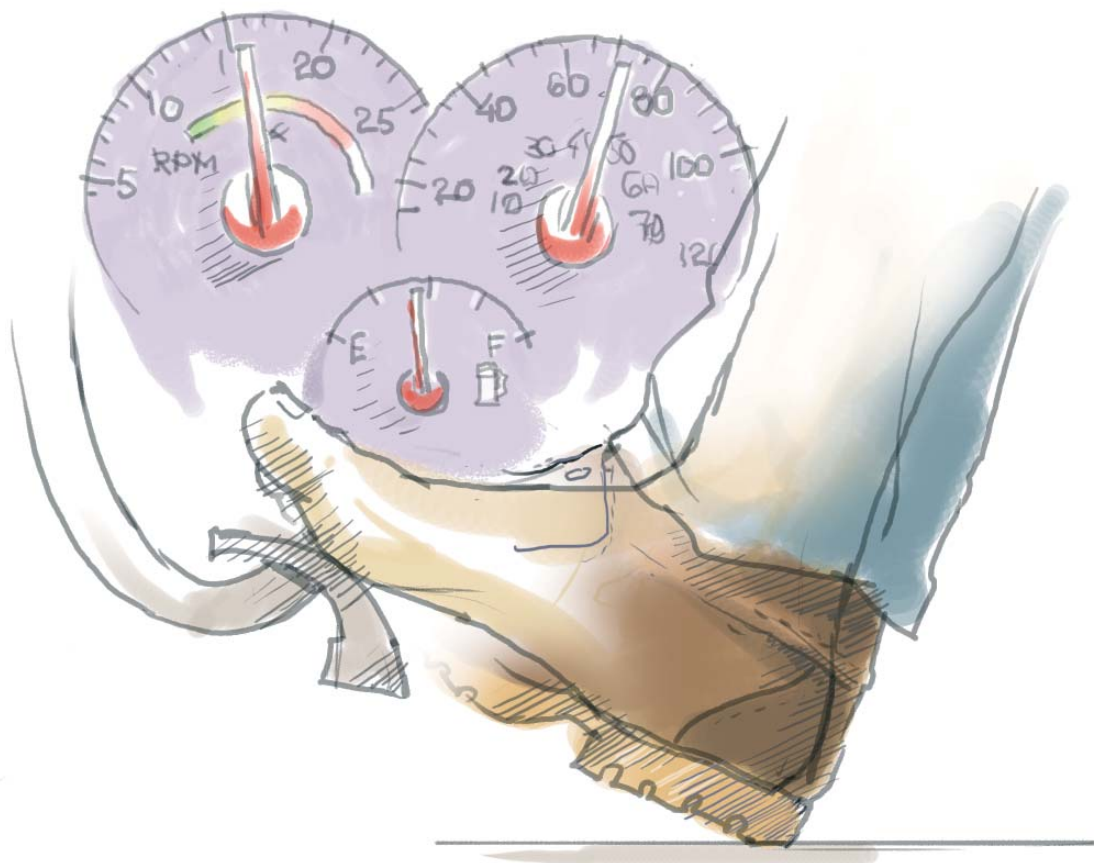


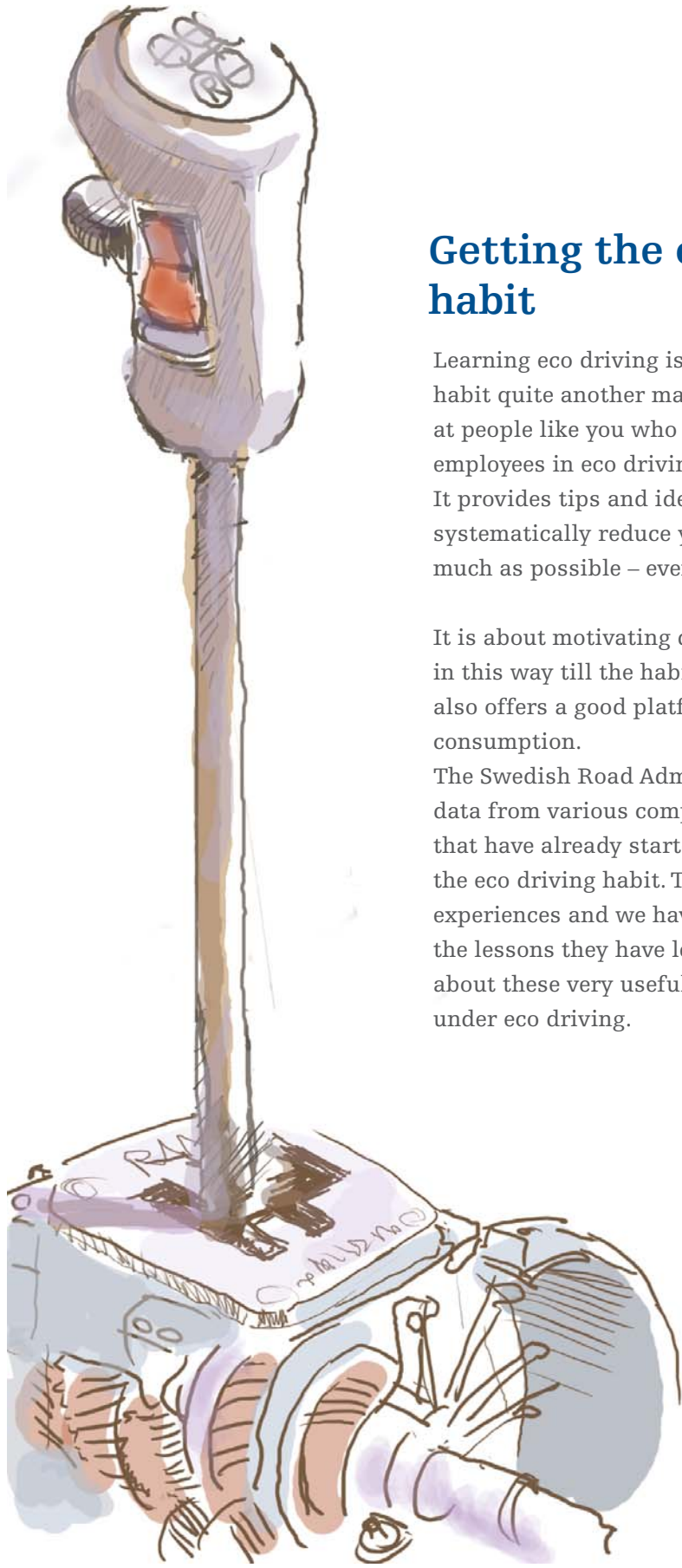
Drive Power

– the art of eco driving



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Getting the eco driving habit

Learning eco driving is one thing, maintaining the habit quite another matter. This leaflet is aimed at people like you who have either trained their employees in eco driving or are planning to do so. It provides tips and ideas to help your company systematically reduce your fuel consumption as much as possible – even in the long run.

It is about motivating drivers to continue driving in this way till the habit becomes ingrained. It also offers a good platform for monitoring fuel consumption.

The Swedish Road Administration has gathered data from various companies and organisations that have already started their drive to maintain the eco driving habit. They have told us about their experiences and we have based this brochure on the lessons they have learnt. You can find out more about these very useful tips at www.vv.se/miljo under eco driving.

Creating a platform for fuel monitoring

Long-term planning and a long-term approach is the key to persuading drivers to maintain the eco driving habit. Drivers must also be motivated enough to use their new know-how. There is plenty to think about ahead of training.

Appoint a fuel monitor

Appointing someone as fuel monitor is a good idea. This should be someone who believes in the cause and is well-informed about it and who is happy to take responsibility for coordinating the campaign to reduce fuel consumption at your company or organisation.

Control group

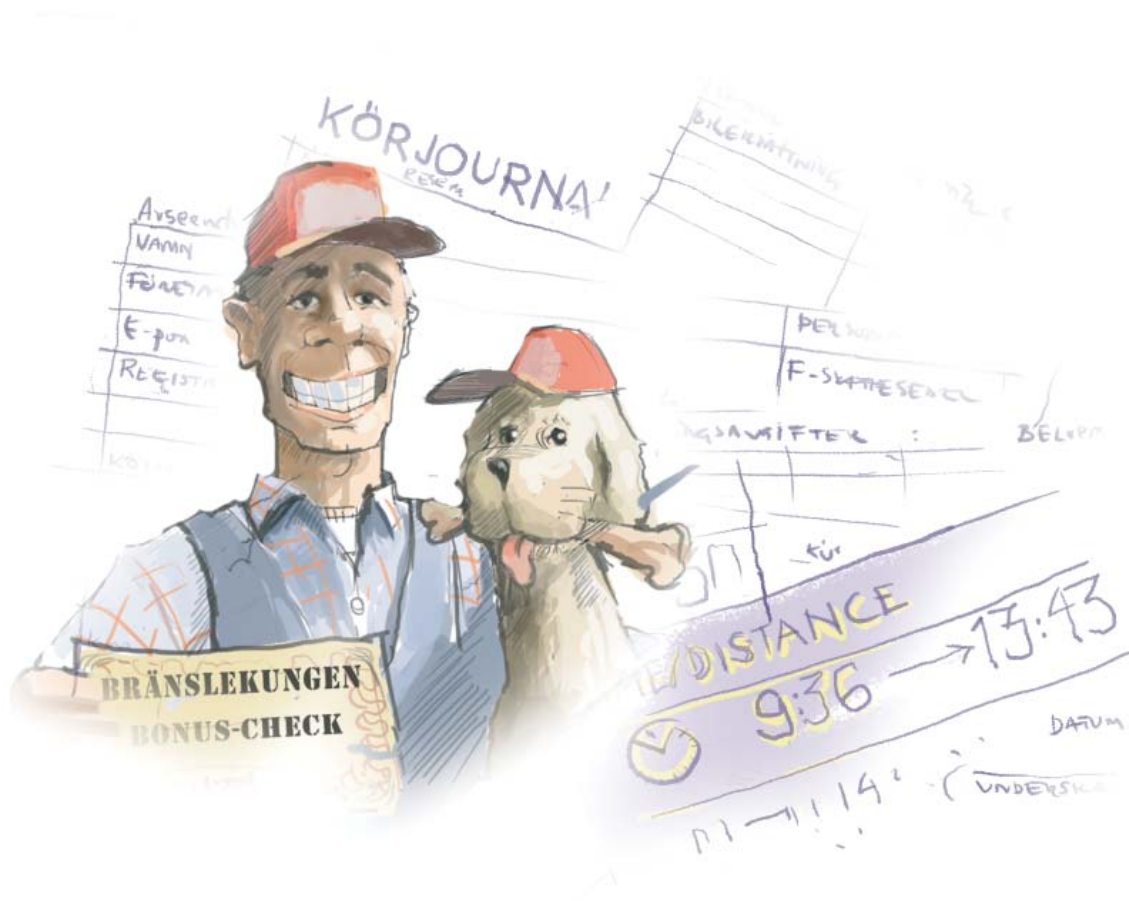
Is the lower fuel consumption really thanks to eco driving? You can check this by establishing a control group, made up of individuals who have not yet been trained in eco driving. This method works best if the control group is a unit that is geographically separate from other employees.

Preparatory measures

What was the situation before? How much fuel did you tend to consume previously? It is worth investing time and energy in measuring fuel consumption for 12 months before the planned training. You will then have something to compare with when you start fuel monitoring. You will also get a better idea of seasonal variations. The more measuring you do, the less the margin of error. You will also be able to get a clear picture of the positive effects of the training.

What do you want to achieve?

Have a good think about what you want to achieve with fuel monitoring and what the end results should deliver. Do you want to realise the economic and environment benefits the training offers? In which case all you need do is measure the total fuel consumption of the whole company. Or do you want to give the drivers feedback on how well they are doing? Or to base bonus systems or profit share schemes on fuel savings? In which case you should breakdown the figures by department, vehicle or driver.



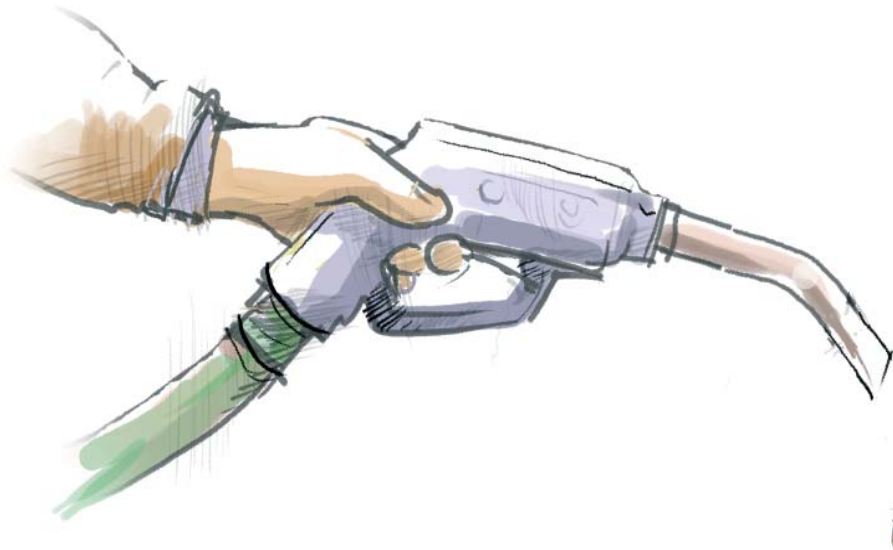
Measure consumption

Establish procedures for how fuel consumption is to be measured. One simple way is to keep a driving log. There are also several excellent administrative and IT support tools available. Many of these can provide summaries where you can track fuel consumption for the company as a whole, and at individual and vehicle level. Read more at www.vv.se/miljo, eco driving.

Obviously, all the above data should be quality assured. This makes it easier to spot and exclude data that look abnormal or are incorrect. Such as entering a partial refuelling as a full tank by mistake when it is only half a tank etc.

Time aspect

To obtain the most reliable results possible you need to be able to compare data from the same time periods (with similar weather, road conditions etc.) in different years. If this monitoring is to be used for bonus or profit share purposes, this can be one way of comparing current fuel consumption with the corresponding period before training.



Other factors that affect fuel consumption

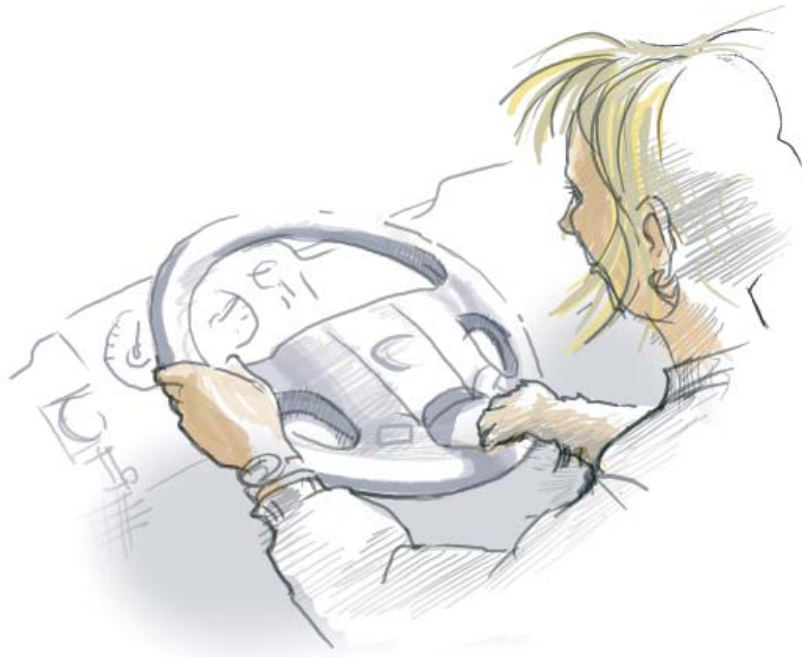
Several factors other than how a driver drives also affect fuel consumption. It is therefore important that as many of these as possible remain consistent from one measuring period to the next. You should keep an eye on factors falling outside the norm. Keep a note of the changes that occur. We have listed below various events and other factors that will affect fuel consumption:

- Change of vehicle. If your calculations are based on total fuel consumption, new vehicles introduced during the measurement period and vehicles that will probably be replaced before the end of the period must be excluded from the statistics.
- Change of tyres. Fuel consumption is higher with winter tyres than summer tyres.
- Tyre pressure. The correct tyre pressure can reduce fuel consumption by 3.5 percent.
- Accessories. All electrical equipment, e.g. air conditioning and additional lights increase fuel consumption. Roof boxes and roof bars create more wind resistance and therefore use more fuel.
- Engine pre-heaters. Every cold start means increased fuel consumption.
- Service intervals. Regular engine services can reduce fuel consumption.
- Type of load. The heavier the vehicle the more fuel it uses.
- Type of driving – urban, extra urban or combined.
- Stick to speed limits. Every kilometre above 80 kmph means fuel consumption goes up – and road safety goes down.



Involve your drivers

To achieve change you need the people involved to be on your side. Ensuring everyone feels a sense of involvement is therefore very important. Positive results and benefits to the company and drivers are strong incentives. Specific measures to employ and help inspire drivers are illustrated below.



Questionnaire

A questionnaire can be a great help in determining what form of incentive would best suit your workplace. Motivation of this kind can influence employee attitudes towards eco driving.



Ambassadors

Train employees who are most enthusiastic about eco driving first. They can then play an important role as ambassadors in persuading other employees to take the course.

Dialogue crucial

Tell your employees about the scheme at the earliest possible opportunity. Explain what is going to happen and what you want to achieve with the training. Explain how it is going to be structured, how training will be done, that you intend to provide regular feedback and what incentives can be available.

Also discuss with your employees the benefits that can accrue for both the company and them. Ask them to suggest possible incentives. Unions are also a natural partner here.



Benefits

Employees will be more motivated if they know from the start that they too will benefit from eco driving training and then maintaining this way of driving. This can be anything from a bonus to profit sharing or some other form of reward or encouragement.

Rewards and encouragement

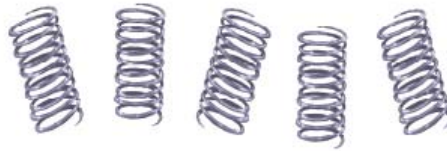
If you decide to reward frugal driving – should the reward be collective or individual? Can you measure how much fuel each driver uses? If you can, do so. If there are a limited number of drivers for each vehicle an alternative can be to measure at vehicle level. Many companies feel it is simplest and fairest if rewards are shared amongst everyone.

Even employees who have already adopted eco driving should be encouraged. A collective reward system will help give these drivers a sense of involvement in the process.

You can also combine various positive measures. www.vv.se/miljo, eco driving has several case studies of what other companies and organisations have done to motivate their employees to maintain the eco driving habit.



...other incentives



Feedback/ comparison

Every driver needs to know that they personally are making a difference. Feedback showing how each individual is doing, is incredibly important for motivation. Feedback can be verbal or in writing and at an individual or collective level. For instance, by producing a monthly progress report (preferably in graphic form) and comparing overall and individual performances. This enables all the drivers to see how they are doing each month and can make them compete with themselves and each other.

Company/ organisation environment goals

Feeling you are helping the company achieve its targets is another driving force. Let's say you want to reduce fuel consumption by percent. You can then monitor results each month, compare the figures with the previous month and with a figure based on the average for the year before the training scheme.

Driver of the month

Publicise which driver has delivered the most frugal performance in the month. Run the story in the employee newsletter, announce it at staff meetings, on notice boards and on the website. Some form of token prize in the form of a T-shirt, cinema tickets, free lunch etc is also appreciated.

Onboard computers

An onboard computer in the vehicle provides feedback to the driver during and after every journey. You can immediately see how your way of driving affects fuel consumption. Onboard computers also have a psychological effect – they become a symbol of eco driving. For a list of various technology aids, please go to: www.vv.se/miljo, and click on eco driving

Collective or individual rewards

Parties, outings, extra holiday, other training courses – the list is endless. Listen to what your employees would appreciate.

Profit sharing

Another incentive is a pay bonus. For instance, a certain percentage of the money saved on fuel bills goes to the drivers. Such bonuses can be calculated on a monthly or quarterly basis. Keeping track should be simple and not too costly. The simplest system is to base bonuses on the collective savings.

Regular training

Offer eco driving training to all new employees and provide refresher courses for drivers who have already taken the course.

Good example

Set a good example yourself. Put eco driving on the management agenda. This will give the issue greater weight.



Choosing coaches

Efficiency coaches are available more or less throughout Sweden (go to www.vv.se/miljo, click on eco driving). It can be worth contacting a coach especially if many employees need training. It can also be worth including refresher courses in the coaching contract. Plan the theory section with the coach so all drivers can attend. Which can mean they have a choice of several sessions.

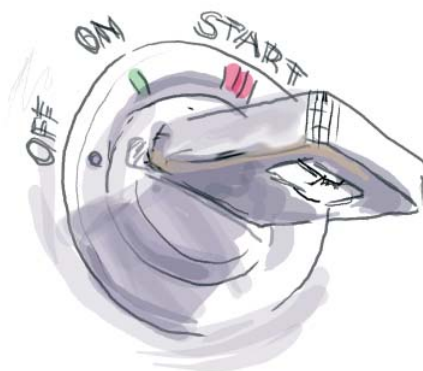
Strike while the iron is hot

Start monitoring fuel usage straight away. As soon as the drivers have done the course, you should introduce the incentive scheme to persuade them to make their newly acquired skills a habit.

Implement the motivational actions agreed upon and include regular feedback and various selective measures.

After several months, start reporting fuel consumption figures. This should then be done regularly, each month

A refresher course or some form of competition can be worth organising every six months. If you did a questionnaire survey before the training, it can be worth doing another one now.



A few final words

Eco driving is a conscious, long-term process. There is a great deal you can do to make employees aware of the benefits of maintaining an eco driving habit. But you cannot simply lecture them. You need to furnish them with knowledge, show the improvements and point out the benefits, for company and individual alike. At that point, when each employee starts appreciating what it is all about, you will have made significant progress. But remember eco driving is a journey in its own right, not a final destination.

Please contact the Swedish Road Administration for further information. Each region has a contact person who is responsible for eco driving initiatives.

Vägverket
781 87 Borlänge
www.vv.se vagverket@vv.se
Tel: 0771-119 119. Textphone: 0243-750 90. Fax: 0243-758 25.



Vägverket