

ECO (Efficient and Cleaner Operations) Stars Fleet Recognition Scheme

Guidance Notes for Applicants



The ECO Stars Fleet Recognition Scheme

The ECO Stars Fleet Recognition Scheme is designed to provide recognition, guidance and advice to operators of goods vehicles, and buses and coaches, who are implementing operational best practice measures, to improve efficiency, reduce fuel consumption and reduce fleet emissions – all helping to improve local air quality, maximise carbon savings and tackle climate change.

The scheme also intends to raise awareness among operators of commercial vehicles of the important role they can play in helping to improve local air quality, through improved fleet environmental performance.

It also provides the opportunity to profile best practice examples adopted and implemented by leading fleets to a wider audience, including other operators, customers and the general public.

Origins of the Scheme

The following key factors have led to the Scheme being developed:

- The impact of heavy industry on local air quality in recent decades has declined
- The impact of road transport on local air quality in recent decades has increased
- Commercial vehicles make a significant contribution to local emissions, both in terms of pollutants and greenhouse gases and pollutants affecting air quality
- Dundee City Council is eager to assist road transport operators by encouraging them to invest in and improve their fleet environmental performance, including maximising potential carbon savings
- The ECO Stars Fleet Recognition Scheme is seen as an appropriate way of providing public recognition for operators of commercial vehicles who are active in taking steps to improve efficiency, reduce fuel consumption and reduce their impact on local air quality

The scheme has been developed by Transport & Travel Research Ltd on behalf of Dundee City Council.



Key Messages

The key messages that the scheme wishes to convey are:

- Operational efficiency measures, particularly in relation to operating cleaner vehicles and effectively managing fuel use, can lead to financial savings and improved environmental performance
- The scheme is able to provide recognition (in the form of acknowledgement at the vehicle level and also at the whole operation level), as well as support, for those operators implementing operational efficiency measures
- Signing up to the scheme and receiving recognition for measures already implemented can help to raise the profile of an organisation's commitment to operational and environmental performance, particularly in the eyes of customers, competitors and local communities
- Effective Fuel Management Programmes, comprising individual component measures such as monitoring and targeting fleet fuel use, driver training and use of supporting equipment and systems, lie at the heart of operational efficiency
- Reduced fuel consumption means reduced operating costs and reduced environmental impact, through reduced vehicle emissions. This leads to both financial and environmental (including carbon) savings

Members of the Scheme

The scheme has something to offer to operators of all types of commercial vehicles (light goods vehicles, heavy goods vehicles, buses and coaches), across all sectors of activity (own account, hire and reward, private and public sectors, retail, haulage, industrial, parcels, community transport, local registered bus services, longer distance coach services etc) and all sizes, based both within Dundee and outside Dundee (but with vehicles spending a significant proportion of time operating within Dundee).

In addition to the fleet operators themselves, the scheme also has a target audience in local businesses which do not actually operate their own fleets but are consignors (i.e. shippers) or consignees (i.e. receivers) of goods, or are significant users of passenger transport services.

Cost of Membership

Membership of the scheme is **free of charge, regardless of fleet size**

Benefits of Membership

The benefits of the scheme for operators across all sectors include:

- Recognition at both vehicle and whole operation levels for what is currently done
- Support, outlining measures which could help to improve performance, potentially leading to higher operational star ratings, over time
- Additional opportunities for enhanced recognition for further progress through the scheme star ratings
- Opportunities to raise operational and environmental profile, particularly in the eyes of other operators, customers and local communities

Further Information

For further information on the Scheme contact its Administrators, Transport & Travel Research Ltd on 01543 416416 quoting 'ECO Stars Dundee' or email ecostars@ttr-ltd.com

How the Scheme Works - Summary Process

Figure 1 Scheme Process



Within one month of membership, Administrator sends 'future road map', containing checklist of measures which could be implemented for each relevant category to lead to higher operational star rating

Administrator contacts member by telephone every three months for updates

Member proactively advises of updates using upgrade form (from website)

Administrator reviews updates, issues new vehicle decals, if appropriate, and assesses whether or not updates have led to new Operational Star rating

If new Operational Star rating is merited, new certificate and letterhead logo issued. If update has not led to new Operational Star rating, then issue of revised version of future 'road map', outlining further steps to be taken for each category for higher Operational Star rating to be achieved

Recognition Criteria

Within the scheme application form, applicants are asked to declare specific details concerning individual vehicles operating (based in or spending significant time) within Dundee and also about practices and processes currently in place within their operations.

Recognition awards will be based on the information declared and described by applicants.

A system of 'booster stars' has been devised to allow additional recognition, above basic engine emission standards, to be provided for use of cleaner vehicle fuels and technologies and in-cab driver and vehicle performance monitoring equipment. The principle behind using these 'booster stars' is to encourage applicants to think beyond merely the Euro engine standards of their vehicle fleets and to consider additional technology, which could help to improve the efficiency and environmental performance of both their vehicles and drivers.

Two levels of scheme recognition exist:

1) Vehicle level

Allocation of a star rating to individual vehicles, based on basic engine standard and fuel used and any pollution control fitted to the vehicle, together with additional technology fitted to the vehicle. Applicants will be issued with vehicle-specific decals (containing the individual vehicle's registration number) for each fleet vehicle, relevant to their individual star rating. As new vehicles are introduced to the fleet or as new technology is fitted to existing vehicles, meriting star upgrades, new decals (complete with vehicle registration number) will be issued.

Table 1 Vehicle Star Rating Criteria

Basic Star Rating Vehicle Criteria	Basic Star Rating	Booster Star Rating options		Booster Stars Available	Maximum Stars Available
		List A	List B		
Euro II		<ul style="list-style-type: none"> • Diesel Particulate Filter (DPF) • CNG / Biomethane / LPG • EGR, SCR • Hybrid electric technology • 50% + blend RTFO accredited biofuel (e.g. bioethanol)¹ 	<ul style="list-style-type: none"> • In-cab fuel monitoring equipment • Other in-cab telematics equipment • Automatic anti-idling cut-off fitted 	1: for any item from lists A or B 2: Either 2 items from list A or 1 for any item from list A, and 1 for any item from list B	2
Euro III	★	<ul style="list-style-type: none"> • Diesel Particulate Filter (DPF) • CNG / Biomethane / LPG • EGR, SCR • Hybrid electric technology • 50% + blend RTFO accredited biofuel (e.g. bioethanol)¹ 	<ul style="list-style-type: none"> • In-cab fuel monitoring equipment • Other in-cab telematics equipment • Automatic anti-idling cut-off fitted 	1: for any item from lists A or B 2: Either 2 items from list A or 1 for any item from list A, and 1 for any item from list B	3
Euro IV or Euro V	★★★	<ul style="list-style-type: none"> • Hybrid electric technology • CNG / Biomethane / LPG • 50% + blend RTFO accredited biofuel (e.g. bioethanol)¹ 	<ul style="list-style-type: none"> • In-cab fuel monitoring equipment • Other in-cab telematics equipment • Automatic anti-idling cut-off fitted 	1: for any item from lists A or B 2: for 1 item from list A and all items from list B	5
Euro VI	★★★★	<ul style="list-style-type: none"> • Hybrid electric technology • CNG / Biomethane / LPG • 50% + blend RTFO accredited biofuel (e.g. bioethanol)¹ 	<ul style="list-style-type: none"> • In-cab fuel monitoring equipment • Other in-cab telematics equipment • Automatic anti-idling cut-off fitted 	1: for any item from lists A or B 2: for 1 item from list A and all items from list B	5 GOLD
Electric or Hydrogen Fuel Cell	★★★★★	• None	• None		5 ZEV

Notes

1) Biofuels: the scheme does not automatically reward use of biodiesel with a booster star, given the evidence that in some cases it raises emissions of NO_x (a contributor to local air pollution), unless a member provides good evidence this does not take place with their vehicles. Please contact scheme administrator if this applies to you to discuss further. 2) Electric vehicles include electric trolleybus.

Revision to criteria: the assessment criteria will be revisited in the future and revised to take account of progressive improvements in vehicle technology. This is likely to be triggered by any announcement of future Euro Emission standards (eg Euro VII).

Table 2 Summary of Star Ratings

Star Rating	Type of Vehicles	
No Star	Euro II	
★	Euro II + 1 booster star	Euro III
★ ★	Euro II + 2 booster stars	Euro III + 1 booster star
★ ★ ★	Euro III + 2 booster stars	Euro IV or Euro V
★ ★ ★ ★	Euro IV or Euro V + 1 booster star	Euro VI
★ ★ ★ ★ ★	Euro IV or Euro V + 2 booster stars	Euro VI + 1 booster star
★ ★ ★ ★ ★ GOLD	Euro VI + 2 booster stars	
★ ★ ★ ★ ★ ZEV	Electric / Hydrogen	

2) Operation level

Allocation of an overall operational star rating, based on percentage of fleet vehicles achieving star ratings and, at the higher levels, additional management practices implemented. Operators will be issued with a certificate and letterhead logo in recognition of the specific operational star rating achieved.

Operation level criteria:

No Star - Scheme member - able to access guidance on how to progress on to a 1-5 Star rating.

One Star - minimum 75% of fleet One Star vehicles and one operational practice or 50% One Star vehicles and all operational practices.

Two Stars - minimum 75% of fleet Two Star vehicles and one operational practice or 50% Two Star vehicle and all operational practices.

Three Stars - minimum 75% of fleet Three Star vehicles and one operational practice, or 50% three star vehicle and all operational practices.

Four Stars - minimum 75% fleet Four Star vehicles plus a minimum of one operational practice in place. **OR** 50% Four Star vehicles plus **ALL** of the following declared as in place and adequately described; formal Fuel Management Programme, driver skills development, accurate vehicle specification, use of operational support systems, operational performance monitoring and targeting (categories are described with examples in application form)

Five Stars - minimum 75% fleet Five Star (inc 5* GOLD and 5* ZEV*)vehicles plus a minimum of one operational practice in place. Or 100% Four Star vehicles plus all operational practices AND 5% 5* vehicle minimum (if 1 full year after Euro VI starts to become available, increase to 10% 5* after 2 years etc)

5 GOLD and 5* ZEV are counted double when considering the proportion of 5* vehicles. E.g if Euro VI hybrid or CNG vehicles make up 5% of the fleet it will count 10% when considering the thresholds required to reach to gain appropriate operator rating. This means an operator can reach a higher operator rating with same number of vehicles IF some of these are very low emissions compared to an operator investing in standard technology only.*

Member Undertakings

By signing the scheme application form (either in hard copy or with electronic signature), members agree to adhere to the requirements of the scheme and to notify the scheme of sale or transfer of fleet vehicles and to remove decals from vehicles when they are removed from the fleet, for whatever reason.

In the event of any operator ceasing to exist as a legal entity or, for example, losing their operator’s licence, or where incorrect or misleading details have been found to have been provided, or conditions of the scheme abused (such as displaying decals on a vehicle other than the one for which they have been issued), a letter will be issued to inform them of their removal from membership of the scheme and requesting decals to be removed from vehicles and for the membership certificate to be destroyed.