



# ECOSTARS

FLEET RECOGNITION SCHEME

## FINAL REPORT

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# Table of contents

<b>1.</b>	<b>Executive Summary</b>	<b>3</b>
1.1	Executive Summary	3
1.2	Resume	4
1.3	Resumen Ejecutivo	5
1.4	Végrehajtási Összefoglaló	7
1.5	Executive Summary	8
1.6	Documento Di Sintesi	9
1.7	Podsumowanie	11
1.8	Stručný Přehled	12
1.9	Sammanfattning	14
<b>2.</b>	<b>What is ECOSTARS?</b>	<b>16</b>
<b>3.</b>	<b>Project Objectives</b>	<b>17</b>
3.1	Project Partners	18
<b>4.</b>	<b>Approach</b>	<b>19</b>
4.1	Local Management	19
4.2	Launch	20
4.3	Local promotion	21
4.4	Member recruitment	22
4.5	Auditing and member assessment	22



4.6	Member certification	23
4.7	Member's services	24
4.7.1	Reassessments	24
4.7.2	Newsletters	25
4.7.3	Additional membership benefits	25
<b>5.</b>	<b>Case Study Results</b>	<b>27</b>
<b>6.</b>	<b>Project Results</b>	<b>29</b>
6.1	Feedback from participating fleet operators	29
6.2	Findings	30
6.3	Beyond the European project	32
<b>7.</b>	<b>Conclusions &amp; Recommendations</b>	<b>34</b>



## 1.1 EXECUTIVE SUMMARY



The ECOSTARS Europe project ('Efficient Cleaner Operation Stars') has delivered significant reductions in the energy used by participant freight and passenger transport. Across eight local schemes, in different municipalities and regions of Europe, more than 300 fleet operators with over 25,000 total vehicles (trucks, vans, buses and coaches) have been provided with targeted fuel efficiency advice through their scheme membership.

The project was established to replicate the successes of the South Yorkshire (UK) ECOSTARS Fleet Recognition Scheme, which was originally developed in 2009, in new and different locations with varying legislative, economic and industrial characteristics.

Using a common assessment process, each local ECOSTARS scheme has rated their members' vehicles and operating practices using star rating criteria, to recognise levels of environmental and energy savings performance. Operators have then received tailor-made support to ensure their fleet is running as efficiently and economically as possible, to help them progress to higher ratings within the scheme.

The primary objective of the ECOSTARS project was to increase the energy efficiency of freight distribution and passenger transport by giving recognition and publicity to those transport operators using cleaner vehicles and sustainable operational management practices. The attributable annual fuel savings to the project have reached 59,858t CO<sub>2</sub>. The project has also helped to encourage the faster introduction of vehicles using clean fuel technologies, as well as the take up of fuel efficient driving schemes.

During the three years of the project, each participating local scheme (Edinburgh, Cantabria, Euskadi, Rotterdam, Parma, Ostrava and South East Sweden) was guided through the process of developing, implementing and promoting their scheme to fleet operators based on the South Yorkshire, UK example. Over the project's duration, a further nine local schemes have been developed by local authorities to help address their own local air quality and energy efficiency targets.

Other outputs from the ECOSTARS project are:

- A handbook for municipalities and regions interested in adopting the ECOSTARS scheme concept.
- A guide for carrying out local scheme management.
- A training course and guide for scheme technical auditors.
- A report which provides an analysis of the transferability of the ECOSTARS concept.
- The final project evaluation report.



Given the demonstrable savings in energy and greenhouse gases that can be achieved through this cost effective policy tool, it is recommended that the ECOSTARS Fleet Recognition Schemes are promoted widely within the fields of transport and air quality. Where possible, new and existing schemes should be provided with the necessary support to grow and develop. This will help to enable an increasing number of clean and efficient transport operations across Europe.

Full details of the ECOSTARS project and all documents can be found on the project website at [www.ecostars-europe.eu](http://www.ecostars-europe.eu).

## 1.2 RESUME



Le projet européen ECOSTARS ('Efficient Cleaner Operation Stars') a déjà permis aux transporteurs de marchandises et de personnes participant à l'opération de réaliser des réductions significatives de l'énergie utilisée. Au travers de huit programmes menés au niveau local dans différentes municipalités et régions d'Europe, des conseils relatifs à une efficacité accrue dans l'utilisation du carburant ont été donnés à plus de 300 opérateurs de flottes disposant de plus 25,000 véhicules au total (camions, bus et cars) dans le cadre de leur participation aux programmes en question.

Le projet a pour but de capitaliser le succès rencontré par le South Yorkshire (UK) ECOSTARS Fleet Recognition Scheme (Programme de Reconnaissance de Flottes ECOSTARS mené dans le Sud Yorkshire en Angleterre) mis au point à l'origine en 2009, en le déployant dans de nouveaux lieux présentant tous des caractéristiques économiques et industrielles distinctes.

Se fondant sur un processus d'évaluation commun, chaque programme ECOSTARS mis en place au niveau local a permis de noter les véhicules ainsi que les pratiques opérationnelles de ses membres en leur attribuant des étoiles dans le but de reconnaître les niveaux des économies réalisées en matière de protection environnementale et d'économie d'énergie. Les opérateurs ont ainsi pu bénéficier d'une documentation et d'une aide sur mesure leur permettant de veiller à ce que la flotte fonctionne aussi efficacement et économiquement que possible et ainsi obtenir peu à peu une meilleure notation dans le cadre du programme.

Le principal objectif poursuivi par le projet ECOSTARS était d'accroître l'efficacité énergétique de la distribution de marchandises et du transport de passagers en mettant un coup de projecteur sur les transporteurs utilisant des véhicules plus propres et appliquant des pratiques de management opérationnel durable. Les économies énergétiques réalisées grâce au projet se sont élevées à 59,858t CO<sub>2</sub>. Le projet a aussi permis d'encourager la production plus rapide de véhicules utilisant des technologies de carburants propres ainsi que la mise en place de programmes de conduite intelligente en matière de consommation de carburant.



Au cours des trois années qu'aura duré le projet, chaque programme local participant (Edimbourg, Cantabria, Euskadi, Rotterdam, Parme, Ostrava et le Sud-est de la Suède) a été guidé dans sa démarche de mise au point, de mise en place et de promotion de son programme auprès d'opérateurs de flottes en s'appuyant sur l'exemple du Sud Yorkshire. Tout au long du projet, neuf autres programmes locaux ont ainsi été développés par des autorités locales dans le but d'apporter leur aide au moment de prendre en main leurs propres objectifs en matière de qualité de l'air et d'efficacité énergétique au niveau local.

Il convient de citer les autres résultats du projet ECOSTARS:

- La remise d'un manuel à l'attention des municipalités et des régions désireuses d'adopter le concept ECOSTARS.
- La remise d'un guide dans le but de mener à bien une véritable gestion du programme au niveau local.
- Une formation et un guide destinés aux auditeurs techniques du programme.
- La remise d'un rapport qui fournit une analyse de la transférabilité du concept ECOSTARS
- Le rapport final d'évaluation du projet.

Au vu des économies démontrables en matière d'énergie et d'émission de gaz à effet de serre qui peuvent être facilement réalisées grâce à cet outil politique rentable, il est recommandé de promouvoir largement la mise en œuvre des Programmes de Reconnaissance de Flottes ECOSTARS dans les domaines du transport et de la qualité de l'air. Dans la mesure du possible, il convient d'apporter aux nouveaux programmes mais également aux programmes existants le soutien leur permettant de grandir et de se développer, d'où la création d'un nombre croissant d'opérations de transport propres et efficaces dans toute l'Europe.

Pour obtenir plus de détails au sujet du projet ECOSTARS et consulter tous les documents indiqués ci-dessus, rendez-vous sur le site web du projet à l'adresse [www.ecostars-europe.eu](http://www.ecostars-europe.eu)

### 1.3 RESUMEN EJECUTIVO



El proyecto ECOSTARS Europe ('Efficient Cleaner Operation Stars' - "Estrellas por funcionamiento más eficiente y limpio") ha permitido importantes reducciones de la energía usada por los participantes del sector del transporte tanto de mercancías como de viajeros. A través de ocho planes locales, en distintas municipalidades y regiones de Europa, más de 300 operadores de flotas con un total de más de 25,000 vehículos (camiones, camionetas, autobuses y autocares) han recibido asesoramiento específico sobre eficiencia en el consumo de combustible mediante su pertenencia al plan.



El proyecto fue implementado para repetir los éxitos del Plan de reconocimiento de flotas ECOSTARS de Yorkshire del Sur (Reino Unido), desarrollado originalmente en 2009, en lugares nuevos y diferentes con diversas características legales, económicas e industriales.

Empleando un proceso de evaluación común, cada plan ECOSTARS local calificó los vehículos y prácticas operativas de sus miembros usando criterios de calificación por estrellas, para reconocer niveles de eficiencia medioambiental y de ahorro de energía. Asimismo los operadores recibieron asistencia a medida para asegurar que sus flotas funcionen de la manera más eficiente y económica posible, para ayudarles a lograr calificaciones más elevadas dentro del plan.

El objetivo principal del proyecto ECOSTARS era aumentar la eficiencia energética de la distribución de carga y el transporte de pasajeros otorgando reconocimiento y publicidad a aquellos operadores de transporte que emplean vehículos más limpios y prácticas de gestión operativa sostenibles. Los ahorros de energía atribuibles al proyecto han sido 59,858t CO<sub>2</sub>. El proyecto también ha ayudado a fomentar la introducción más rápida de vehículos que usan tecnologías de combustible limpias, así como la adopción de planes de conducción eficiente en términos de consumo de combustible.

Durante los tres años del proyecto, cada plan local participante (Edimburgo, Cantabria, Euskadi, Rotterdam, Parma, Ostrava y Sueca del Sudeste) fue guiado a través del proceso de desarrollar, implementar y promover su plan ante operadores de flotas basándose en el ejemplo de Yorkshire del Sur. A lo largo de la duración del proyecto, nueve planes locales adicionales fueron desarrollados por autoridades locales para ayudar a ejecutar sus propios objetivos locales de calidad del aire y eficiencia energética.

Otros resultados del proyecto ECOSTARS son:

- Un manual para las municipalidades y regiones interesadas en adoptar el concepto del plan ECOSTARS.
- Una guía para la gestión de planes locales.
- Un curso de formación y una guía para los auditores técnicos del plan.
- Un informe que proporciona un análisis de la transferibilidad del concepto ECOSTARS.
- El informe de evaluación final del proyecto.

Dados los ahorros demostrables de energía y de gases de efecto invernadero que pueden ser logrados mediante este económico instrumento de política, se recomienda promover ampliamente el uso de Planes de reconocimiento de flotas ECOSTARS en los campos del transporte y la calidad del aire. En lo posible, los planes nuevos y los existentes deben recibir la asistencia necesaria para crecer y desarrollarse. Esto ayudará a hacer posible un número cada vez mayor de operaciones de transporte limpias y eficientes en toda Europa.

Los detalles completos del proyecto ECOSTARS y todos los documentos a los que se hace referencia en líneas precedentes se encuentran en la página Web del proyecto [www.ecostars-europe.eu](http://www.ecostars-europe.eu)

## 1.4 VÉGREHAJTÁSI ÖSSZEFOGLALÓ



Az ECOSTARS Europe projekt („Efficient Cleaner Operation Stars”, hatékony környezetvédelmi intézkedések értékelése) szignifikáns csökkenést eredményezett a részt vevő áru- és utasszállítók energiafelhasználásában. A különböző európai önkormányzatokon és régiókon belül nyolc helyi rendszer keretében több mint 300 részt vevő flottaüzemeltetőt láttak el célzott üzemanyag-takarékossági tanácsokkal, akik összesen 25,000 járművet (teherautókat, furgonokat, helyi és távolsági buszokat) működtetnek.

A projektet az eredetileg 2009-ben, Dél-Yorkshire-ben (Egyesült Királyság) kialakított ECOSTARS flottaértékelési rendszer sikerének mintájára hozták létre új, eltérő gazdasági és ipari körülményekkel jellemezhető területeken, ahol különböző jogszabályok voltak érvényben.

Az egyes helyi ECOSTARS rendszerek közös értékelési rendszert alkalmazva, csillagokat tartalmazó értékelési kritériumok alapján értékelték a tagjaik járműveit és működési gyakorlatát, ezáltal osztályozták a környezetvédelmi és energiahatékonysági intézkedések teljesítményét. Az üzemeltetők ezt követően személyre szabott támogatást kaptak annak érdekében, hogy biztosíthassák a flotta lehető leghatékonyabb és legkörnyezettudatosabb működtetését, valamint a rendszeren belüli magasabb besorolás elérését.

Az ECOSTARS projekt elsődleges célja az áru- és utasszállítás energiahatékonyságának növelése volt azáltal, hogy elismerik és bemutatják a nyilvánosságnak azokat a szállítókat, akik környezetbarátabb járműveket üzemeltetnek és fenntartható üzemeltetési gyakorlatot folytatnak. A projektnek betudható üzemanyag-megtakarítás eddig 59,858t CO<sub>2</sub> volt. A projekt egyben segített felgyorsítani a tiszta üzemanyag-technológiákat alkalmazó járművek bevezetését, valamint a hatékony üzemanyag-felhasználást lehetővé tevő vezetési gyakorlat felvételét.

A projekt három éve alatt a dél-yorkshire-i példa alapján fejlesztették ki és implementálták a rendszert az egyes résztvevőknél (Edinburgh, Cantabria, Euskadi, Rotterdam, Parma, Ostrava és Délkelet-Svédország), valamint ez alapján népszerűsítették azt a flottaüzemeltetők körében. A projekt időtartama alatt a helyi hatóságok további kilenc helyi rendszert fejlesztettek ki a saját levegő minőségügyi és energiahatékonysági céljaik eléréséhez.

Az ECOSTARS projekt további eredményei:

- Létrejött egy kézikönyv az ECOSTARS rendszer koncepciója iránt érdeklődő önkormányzatok és régiók számára.





- Kialakítottak egy útmutatót a helyi rendszerek kiterjesztésére vonatkozóan.
- Tréninget szerveztek és útmutatót készítettek a rendszer műszaki auditorai számára.
- Létrejött egy jelentés, amely az ECOSTARS koncepció más helyekre történő átvihetőségét vizsgálta.
- A projekt záró értékelési jelentése.

A költséghatékonysági eszköznek köszönhető látványosan alacsonyabb energiafelhasználás és az üvegházhatású gázok kibocsátásában elért csökkenés alapján javasolt az ECOSTARS flottaértékelési rendszerek széles körű alkalmazása a szállítás és a levegő minőségügy területein. Ahol lehetőség van rá, támogatni kell az új és meglévő rendszerek kialakítását, illetve fejlesztését. Ez hozzá fog járulni a tiszta és hatékony szállítási intézkedések számának növekedéséhez egész Európában.

Az ECOSTARS projekt részletei és a fentiekben hivatkozott dokumentumok megtalálhatók a projekt weboldalán: [www.ecostars-europe.eu](http://www.ecostars-europe.eu)

## 1.5 EXECUTIVE SUMMARY



Das Projekt ECOSTARS Europe (“Efficient Cleaner Operation Stars“) hat dazu geführt, dass die Teilnehmer den Energieverbrauch von Güter- und Personenverkehr erheblich senken konnten. Im Rahmen acht lokaler Programme in verschiedenen Gemeinden und Regionen Europas wurden mehr als 300 Fuhrparkbetreiber mit einer Gesamtzahl von über 25,000 Fahrzeugen (Lastkraftwagen, Lieferwagen und Bussen) gezielt hinsichtlich

Treibstoffeffizienz beraten.

Das Projekt wurde ins Leben gerufen, um den Erfolg des South Yorkshire (UK) ECOSTARS Fleet Recognition Scheme, das ursprünglich 2009 entwickelt wurde, an neuen und anderen Orten mit unterschiedlichen gesetzlichen, wirtschaftlichen und industriellen Merkmalen zu wiederholen.

In einem gemeinsamen Beurteilungsverfahren wurden die Fahrzeuge und Betriebspraktiken der Teilnehmer jedes ECOSTARS-Programms mithilfe eines Sterne-Bewertungssystems bewertet, um den Grad der Umweltentlastung und der Energieersparnis deutlich zu machen. Danach erhielten die Betreiber individuelle Unterstützung, um sicherzustellen, dass die Fahrzeugflotte so effizient und sparsam wie möglich läuft, sodass sie bessere Werte erzielen können.

Das vorrangige Ziel des ECOSTARS-Projekts war es, die Energieeffizienz im Güter- und Personenverkehr durch Anerkennung und öffentliche Aufmerksamkeit für Transportunternehmen mit saubereren Fahrzeugen und nachhaltigen Betriebspraktiken zu steigern. Die im Zusammenhang mit dem Projekt eingesparte Treibstoffmenge beträgt 59,858t CO<sub>2</sub>. Zudem hat das Projekt zu einer



beschleunigten Einführung von Fahrzeugen mit sauberen Treibstofftechnologien sowie zur Förderung treibstoffeffizienter Fahrweisen beigetragen.

Während der dreijährigen Projektdauer wurde jedes teilnehmende lokale Programm (Edinburgh, Kantabrien, Baskenland, Rotterdam, Parma, Ostrava und Südostschweden) auf der Grundlage des Beispiels von South Yorkshire bei der Entwicklung, der Umsetzung und der Bewerbung des Programms bei Fuhrparkbetreibern begleitet. Im Verlauf des Projekts wurden von lokalen Behörden neun weitere lokale Programme entwickelt, um ihre jeweiligen eigenen Herausforderungen hinsichtlich Luftqualität und Energieeffizienz in Angriff zu nehmen.

Weitere Ergebnisse des ECOSTARS-Projekts sind:

- Ein Handbuch für Gemeinden und Regionen, die daran interessiert sind, das Konzept des ECOSTARS-Programms zu übernehmen.
- Ein Handbuch zum Management eines lokalen Programms.
- Eine Schulung und ein Handbuch für technische Berater.
- Ein Bericht mit einer Analyse der Übertragbarkeit des ECOSTARS-Konzepts.
- Der Abschluss-Evaluationsbericht über das Projekt.

Angesichts der nachweisbaren Energie- und Treibhausgaseinsparungen, die durch dieses kosteneffiziente unternehmenspolitische Instrument erzielt werden können, wird eine breite Bewerbung der ECOSTARS Fleet Recognition Schemes in den Bereichen Transport und Luftqualität empfohlen. Wo es möglich ist, sollten neue und bereits bestehende Programme angeboten und mit der für das Wachstum und die Weiterentwicklung notwendigen Unterstützung ausgestattet werden. So kann das Transportwesen in ganz Europa sauberer und effizienter werden.

Sämtliche Details zum ECOSTARS-Projekt und alle oben genannten Dokumente stehen auf der Projekt-Website [www.ecostars-europe.eu](http://www.ecostars-europe.eu) zur Verfügung.

## 1.6 DOCUMENTO DI SINTESI



Il progetto ECOSTARS Europe ('Efficient Cleaner Operation Stars') ha permesso alle flotte di veicoli commerciali e passeggeri che aderiscono al progetto di ottenere riduzioni energetiche significative. Negli otto schemi locali, implementati in varie città e regioni d'Europa, più di 300 operatori di flotte con un totale di oltre 25,000 veicoli (autocarri, furgoni, autobus e pullman) hanno ottenuto una consulenza mirata su come rendere più efficiente il consumo di carburante grazie alla loro adesione allo schema.



Il progetto è stato attuato per replicare il successo dell'ECOSTARS Fleet Recognition Scheme del Sud Yorkshire (Regno Unito), sviluppato originariamente nel 2009, in nuove e diverse località con caratteristiche legislative, economiche e industriali differenti.

Utilizzando un processo di valutazione comune, ogni schema locale ECOSTARS ha classificato i veicoli e le prassi operative dei propri membri con un rating basato sull'assegnazione di stelle, allo scopo di riconoscere i livelli di performance ambientale e di risparmi energetici. In seguito gli operatori hanno beneficiato di un supporto su misura per assicurare che la flotta funzionasse nel modo più efficiente ed economico possibile, aiutandoli così a progredire verso punteggi più elevati all'interno del loro schema.

L'obiettivo principale del progetto ECOSTARS era di aumentare l'efficienza energetica della distribuzione commerciale e del trasporto di passeggeri attraverso un riconoscimento pubblico a quegli operatori di trasporto che utilizzano veicoli più puliti e pratiche di gestione operativa sostenibili. I risparmi di carburante attribuibili al progetto sono stati 59,858t CO<sub>2</sub>. Il progetto ha anche aiutato a incoraggiare un'introduzione più rapida di veicoli che impiegano tecnologie pulite in termini di carburante e l'adozione di schemi di guida che incrementino l'efficienza dei consumi.

Nel corso dei tre anni di progetto, tutti gli schemi locali che hanno aderito (Edimburgo, Cantabria, Euskadi, Rotterdam, Parma, Ostrava e Sud-Est della Svezia) sono stati guidati attraverso il processo di sviluppo, implementazione e promozione del loro schema nei confronti dei gestori di flotte, sulla base dell'esempio del Sud Yorkshire. Durante il progetto, altri nove schemi sono stati sviluppati da amministrazioni locali per favorire il conseguimento dei propri obiettivi locali in termini di qualità dell'aria e di efficienza energetica.

Altri risultati frutto del progetto ECOSTARS sono:

- Un manuale per i comuni e le regioni interessati ad adottare il concetto di schema ECOSTARS.
- Una guida per realizzare la gestione dello schema locale.
- Un corso e una guida di formazione per auditor tecnici degli schemi.
- Un report che fornisce un'analisi della trasferibilità del concetto ECOSTARS.
- Il report di valutazione finale del progetto.

Dati i risparmi dimostrabili nei consumi di energia e nelle emissioni di gas serra che si possono ottenere tramite questo vantaggioso strumento di politica di gestione delle flotte, è consigliabile che l'uso dell'ECOSTARS Fleet Recognition Scheme sia ampiamente promosso negli ambiti del trasporto e della qualità dell'aria. Laddove possibile, agli schemi nuovi o già esistenti si deve fornire il supporto



necessario perché possano crescere e svilupparsi. Questo renderà possibile un numero crescente di trasporti puliti ed efficienti in tutta Europa.

I dettagli kompleti relativi al progetto ECOSTARS e tutti i documenti a cui si fa riferimento in precedenza sono disponibili sul sito web del progetto all'indirizzo [www.ecostars-europe.eu](http://www.ecostars-europe.eu)

## 1.7 PODSUMOWANIE



Realizacja europejskiego projektu ECOSTARS („Zwiększenie Wydajności Użycia Czystych Energii”) umożliwiła osiągnięcie znaczącego obniżenia zużycia energii przez uczestniczące w realizacji projektu podmioty prowadzące działalność w dziedzinie transportu towarowego i pasażerskiego. Za pośrednictwem ośmiu programów lokalnych, realizowanych w różnych miastach i regionach Europy, ponad 300 operatorów flot, zarządzających w sumie ponad 25,000 pojazdami (ciężarówki, samochody dostawcze, autobusy i autokary) mogło w ramach uczestnictwa w programie skorzystać z indywidualnych, przeznaczonych wyłącznie dla nich porad dotyczących zapewnienia oszczędności paliwa.

Projekt został opracowany z myślą o wykorzystaniu doświadczeń z zakończonego wielkim sukcesem, zrealizowanego w regionie Południowego Yorkshire (Wielka Brytania) programu Oceny Zarządzania Flotą Pojazdów ECOSTARS, wprowadzonego początkowo w roku 2009, a także w celu zapewnienia możliwości realizacji projektu w różnorodnych lokalizacjach o rozmaitych uwarunkowaniach prawnych, ekonomicznych oraz przemysłowych.

Poprzez zastosowanie wspólnego procesu oceny, w ramach wszystkich lokalnych programów ECOSTARS przeprowadzone zostały analizy dotyczące pojazdów wykorzystywanych przez uczestników oraz ich praktyk eksploatacyjnych, umożliwiające następnie przyznanie ocen w postaci systemu gwiazdek, odpowiadających poszczególnym poziomom wydajności w zakresie ochrony środowiska i oszczędności energii. Operatorzy otrzymali następnie indywidualne, przeznaczone wyłącznie dla nich porady dotyczące możliwości eksploatacji ich flot pojazdów w sposób jak najbardziej wydajny i oszczędny, co umożliwi im uzyskiwanie coraz wyższych ocen w ramach dalszej realizacji projektu.

Podstawowym celem projektu ECOSTARS było zwiększenie wydajności wykorzystania energii w zakresie transportu towarowego i pasażerskiego, poprzez uznanie i promowanie osiągnięć operatorów korzystających z pojazdów o lepszych parametrach ochrony środowiska oraz wykorzystujących w zakresie zarządzania najlepsze praktyki umożliwiające zapewnienie zrównoważonego rozwoju. Uzyskane dzięki realizacji projektu oszczędności paliwa wyniosły 59,858t CO<sub>2</sub>. Realizacja projektu przyczyniła się również do szybszego wprowadzania do eksploatacji pojazdów korzystających z bardziej czystszych technologii zużycia paliwa oraz wdrożenia programów mających na celu zmniejszenie tego zużycia.



Podczas trzech lat realizacji projektu, w ramach każdego z przeprowadzanych programów lokalnych (Edynburg, Kantabria, Kraj Basków, Rotterdam, Parma, Ostrawa i Południowo-Wschodnia Szwecja) realizowany był proces projektowania, wdrażania i promowania rozwiązań przyjętych wcześniej przez operatorów flot pojazdów prowadzących działalność w brytyjskim regionie Południowego Yorkshire. W okresie realizacji projektu, samorządy lokalne opracowały kolejne dziewięć programów, umożliwiających im osiągnięcie indywidualnych celów w zakresie ograniczenia zanieczyszczeń powietrza oraz zwiększenia wydajności zużycia energii.

Dalsze rezultaty realizacji projektu ECOSTARS obejmują:

- Opracowanie specjalnego podręcznika, przeznaczonego dla władz miejskich i regionalnych zainteresowanych wdrożeniem koncepcji programów ECOSTARS.
- Opracowanie przewodnika dotyczącego miejscowego zarządzania realizacją programów lokalnych.
- Opracowanie szkolenia i przewodnika dla audytorów technicznych programów.
- Sporządzenie raportu zawierającego analizę możliwości transpozycji koncepcji ECOSTARS i wykorzystania jej w innych lokalizacjach.
- Sporządzenie końcowego raportu zawierającego ocenę projektu.

Biorąc pod uwagę udowodnione oszczędności energii i ograniczenie emisji gazów cieplarnianych, jakie może zostać osiągnięte poprzez wdrożenie tej mało kosztownej polityki, zalecane jest szerokie promowanie Programów Oceny Zarządzania Flotą Pojazdów ECOSTARS w odniesieniu do różnorodnych zagadnień dotyczących zarządzania działalnością transportową oraz ograniczania zanieczyszczeń powietrza. W każdym przypadku, kiedy tylko jest to możliwe, nowe i istniejące programy powinny otrzymywać odpowiednie wsparcie w celu zapewnienia dalszego rozwoju realizacji projektu. Umożliwi to wprowadzenie na terenie całej Europy nowych rozwiązań zapewniających zmniejszenie zanieczyszczeń i zwiększenie wydajności prowadzonej działalności transportowej.

Szczegółowe informacje dotyczące projektu ECOSTARS oraz całość wymienionej powyżej dokumentacji są dostępne na witrynie internetowej projektu pod adresem [www.ecostars-europe.eu](http://www.ecostars-europe.eu)

## 1.8 STRUČNÝ PŘEHLED



Díky projektu ECOSTARS Europe („Efficient Cleaner Operation Stars“) dosáhli účastníci nákladní i veřejné dopravy významných energetických úspor. Na základě osmi lokálních schémat v různých evropských městech a regionech obdrželo více než 300 provozovatelů vozových parků s celkovým počtem



25,000 vozidel (nákladních vozů, dodávek, městských a dálkových autobusů) doporučení ohledně potenciálu úspor paliv.

Záměrem projektu bylo navázat na úspěch schématu ECOSTARS v Jižním Yorkshire (Velká Británie), působícího již od roku 2009, tentokrát v nových místech s odlišnými podmínkami z hlediska legislativy, ekonomického prostředí a průmyslové vyspělosti.

Každé místní schéma ECOSTARS jednotně hodnotilo vozidla a provoz vozového parku svých členů prostřednictvím počtu hvězdiček přidělených na základě jednoduchých kritérií zohledňujících úroveň ochrany životního prostředí a úspory energie. Dopravci poté obdrželi doporučení na míru své společnosti pro zlepšení efektivity a ekonomiky provozu jejich vozového parku, která jim umožňuje postoupit na vyšší hodnocení ECOSTARS.

Hlavním cílem projektu ECOSTARS bylo zvýšení energetické efektivity nákladní a veřejné dopravy formou ocenění a propagace provozovatelů, jejichž vozidla produkují méně zplodin a jejichž provoz je v souladu s udržitelným rozvojem. Díky projektu se podařilo uspořit přibližně celkem 59,858t CO<sub>2</sub> paliva. Projekt přispěl též k rychlejšímu zavádění vozidel, která využívají technologie pro čistá paliva, a k rozšíření řídičských dovedností snižujících spotřebu paliva.

Během tří let trvání projektu byla připravena, zavedena a propagována schémata ve všech zúčastněných regionech (Edinburgh, Kantábrie, Baskicko, Rotterdam, Parma, Ostrava a Jihovýchodní Švédsko), které vycházely z příkladu v Jižním Yorkshire. Během projektu vypracovaly místní úřady dalších devět lokálních schémat, která přispějí ke splnění stanovených cílů ohledně zlepšení kvality ovzduší a účinnějšího využívání energií.

Projekt ECOSTARS navíc poskytuje následující materiály a programy:

- Příručku pro města a regiony, které mají zájem o účast v programu ECOSTARS.
- Příručku pro management místního schématu ECOSTARS.
- Školení a příručku pro technické auditory.
- Zprávu s analýzou přenositelnosti konceptu ECOSTARS.
- Zprávu s celkovým hodnocením projektu.

Vzhledem k prokazatelným úsporám energie, omezení produkce skleníkových plynů a snížení provozních nákladů, jakých lze dosáhnout prostřednictvím tohoto programu, se doporučuje široká propagace programu ECOSTARS Fleet Recognition Schemes v oblasti nákladní a veřejné dopravy a zvyšování kvality ovzduší. Všude, kde to bude možné, by měla být poskytnuta patřičná podpora rozvoje nových i stávajících systémů. To přispěje k šíření čistější a energeticky efektivnější dopravy v Evropě.



Úplné informace o projektu ECOSTARS a veškeré dokumenty zmiňované v tomto textu naleznete na webovém adrese [www.ecostars-europe.eu](http://www.ecostars-europe.eu) v anglickém jazyce, případně na [www.ecostars-ostrava.cz](http://www.ecostars-ostrava.cz) česky.

## 1.9 SAMMANFATTNING



Europaprojektet ECOSTARS ('Efficient Cleaner Operation Stars') har kunnat uppvisa markanta minskningar i energianvändningen för i projektet deltagande åkerier inom gods- och persontrafik. I åtta lokala projekt, omfattande olika kommuner och regioner i Europa, har mer än 300 åkerier som deltar i projektet, med mer än 25,000 fordon (lastbilar, skåpbilar, bussar och turistbussar), fått målinriktad rådgivning om bränsleeffektivitet.

Projektet bildades för att bygga vidare på framgångarna med ECOSTARS Fleet Recognition Scheme från South Yorkshire i Storbritannien, ett projekt som ursprungligen utvecklades 2009. Idén var att testa konceptet på olika nya platser med varierande rättsliga, ekonomiska och industriella förutsättningar.

Med användning av ett gemensamt utvärderingsförfarande har de lokala ECOSTARS-programmen betygsatt deltagarnas fordon och driftsrutiner med hjälp av ett "stjärnmärkningssystem", för att bedöma hur effektivt de lever upp till energibesparings- och miljökriterier. De enskilda transportföretagen har sedan fått skräddarsytt stöd för fordonsflottan som ska möjliggöra att den fungerar så effektivt och ekonomiskt som möjligt, och hjälpa dem uppnå ett högre betyg i systemet.

Det främsta syftet med ECOSTARS-projektet var att öka energieffektiviteten inom gods- och persontransportsektorn genom att uppmärksamma och ge publicitet åt transportföretag som använder renare fordon och hållbara driftsprinciper. De bränslebesparingar som kunnat tillskrivas projektet har uppgått till 59,858t CO<sub>2</sub>. Projektet har också bidragit till att uppmuntra en snabbare introduktion av fordon som använder rent bränsle teknologi, liksom införandet av bränsleeffektiva driftsrutiner.

Under de tre år som ECOSTARS pågått har vart och ett av de lokala projekten (Edinburgh, Cantabria, Euskadi, Rotterdam, Parma, Ostrava och sydöstra Sverige) fått stöd med utveckling, införande och främjande av de enskilda åkeriernas program, baserat på erfarenheterna från South Yorkshire. Dessutom har ytterligare nio lokala program igångsatts av de lokala myndigheterna för att ta itu med lokala luftkvalitets- och energieffektivitetsmål.

Övriga produkter från ECOSTARS-projektet:

- En handbok för kommuner och regioner som är intresserade att införa ECOSTARS-konceptet.
- En handledning för att administrera lokala program.



- En utbildning och handledning för tekniska programutvärderare.
- En rapport som analyserar överförbarheten av ECOSTARS-konceptet.
- En rapport innehållande en slutlig utvärdering av projektet.

Med tanke på de energibesparingar och minskade utsläpp av växthusgaser som kan uppnås genom detta kostnadseffektiva verktyg, rekommenderar vi att användningen av ECOSTARS Fleet Recognition Schemes ges vid spridning inom områdena transportsystem och luftkvalitet. Där så är möjligt, bör nya och befintliga program ges nödvändigt stöd för att växa och utvecklas. Detta ska bidra till att möjliggöra ett ökande antal renare och effektiva transporter över hela Europa.

Fullständig information om ECOSTARS-projektet och samtliga ovan nämnda dokument finns att tillgå på projektets webbplats [www.ecostars-europe.eu](http://www.ecostars-europe.eu)







## 2.

# What is ECOSTARS?

The ECOSTARS Fleet Recognition Scheme is a free, voluntary scheme designed to provide recognition, guidance and advice to all operators of commercial vehicles (heavy/light goods vehicles, vans, buses and coaches), either based in, or serving a specific geographical area.

ECOSTARS rates individual vehicles and a fleet's overall road transport operation using star rating criteria, to recognise levels of operational and environmental performance (from the perspective of air quality). Each operator signing up to an ECOSTARS scheme receives tailor made support to ensure that their fleet is running as efficiently and economically as possible, to help them progress to higher star ratings.

ECOSTARS was developed for the South Yorkshire Transport Plan Air Quality Steering Group in the UK, and launched in 2009, as part of a regional air quality initiative. This was in response to the decline of heavy industry in the region, with the impact of road transport on local air quality increasing accordingly. Commercial vehicles now make a significant contribution to local emissions in terms of pollutants, and greenhouse gas emissions, and there are a number of Air Quality Management Areas within South Yorkshire.

The initiative was eager to assist road transport operators by encouraging them to invest in and improve their fleet environmental performance, including maximising carbon savings. The ECOSTARS Fleet Recognition Scheme that was subsequently developed was 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.

Following a successful funding application to the Intelligent Energy Europe (IEE) STEER programme, a three year project to replicate the ECOSTARS concept in a further seven cities and regions across Europe was undertaken: ECOSTARS Europe.

This document is the final report of the ECOSTARS Europe project.





### 3.

## Project Objectives

The most important objective for ECOSTARS was to help deliver a reduction in the energy used in urban freight transport. This was to be achieved through supporting fleet operators with an increased adoption of fuel efficiency measures.

This support was realised by providing a free membership scheme for fleet operators which provides recognition for energy efficient vehicles and fleet operators.

The key mechanisms were a star rating assessment scheme, the provision of free advice to operators on how to improve their energy efficiency (the road map), and promotion of the scheme with publicity for the member organisations. The key actors involved were municipalities and regional public sector organisations working in partnership with operators of vehicle fleets.

The project was designed to address many of the IEE programmes' general objectives for Energy Efficient Transport:

1. To encourage a shift of passengers and/or freight to less energy-intensive modes and to increase the energy efficiency of the entire mobility chain.
2. To raise the awareness of different target groups in a changing society of their mobility behaviour and its impact on energy consumption and to motivate and achieve changes in behaviour.
3. To transfer, apply and promote widely proven best practice, strategies and technologies.
4. Increase the energy efficiency of freight distribution, for example by developing coordination, management and information schemes in actions coordinated between administrators and stakeholders, such as fleet operators, distributors, retailers and customers.

The six specific objectives for the ECOSTARS project were:

1. To develop the successful ECOSTARS scheme in South Yorkshire in the UK and replicate in a further seven case study areas (Edinburgh [UK], Ostrava [CZ], Rotterdam [NE], Cantabria [ES], Basque region [ES], South East Sweden [SE] and Parma [IT]), to promote more energy efficient and cleaner road freight movements.
2. To increase the number of freight vehicles using clean fuel technologies.
3. To improve the fuel management methods of commercial vehicle operators.
4. To increase the number of transport operators promoting eco-driving skills among their



workforce.

5. To train auditors for each local scheme in the evaluation of vehicle fleet operations and in the provision of advice on how to improve energy efficiency.
6. To transfer knowledge and exchange experience between experienced municipalities and other organisations and less experienced municipalities and other organizations.

Following the implementation of the local ECOSTARS schemes at the case study sites, the results and lessons learned are being used to show the benefits of the schemes, and facilitate the uptake of ECOSTARS by other public and private sector organisations throughout Europe.

Sustaining these actions should lead to a more integrated approach in the direction which participating cities and regions take to environmental efficiency recognition and advice to the private sector. This has the potential to bring about a Europe-wide strategic change in fleet operation and clean technology procurement practices.

### 3.1 PROJECT PARTNERS

Twelve partners, representing public and private organisations from across Europe collaborated on the delivery of the project. These were:

Barnsley Metropolitan Borough Council (UK)	InfoMobility Parma (IT)	Polis (BE)
CDV (CZ)	IVL-LEE (ES)	South East Sweden Energy Agency (SE)
City of Edinburgh Council (UK)	Municipality of Rotterdam (NE)	Transport & Travel Research (TTR) (UK)
CTL Cantabria (ES)	ISIS (IT)	WSP Sweden (SE)



## 4.

# The ECOSTARS Approach



The establishment of, and responsibility for a local ECOSTARS scheme, including strategy, management and implementation, is typically led by the municipality (or regional government) of the local scheme area. Municipalities and their citizens are the main beneficiaries of the collective impacts of ECOSTARS schemes through resultant improvements to local air quality.

However, experience from the project shows that some or all of the local scheme management and/or fleet technical auditing (e.g. Local Scheme Auditors) may be carried out by specialist contractors or consultants on behalf of the municipality. This approach can aid in faster engagement with industry using existing contact networks whilst the municipality remains in an overview and directorial role.

The scheme management activities can be further divided into seven distinct tasks: (A) Local management (B) Launch, (C) Local promotion, (D) Member recruitment, (E) Auditing, (F) Certification and (G) Membership services.

### 4.1 LOCAL MANAGEMENT

It is recommended that each scheme forms a steering group to oversee the local implementation. As a minimum this should include the Local Scheme Manager and Local Scheme Auditor. The steering group may also include public sector stakeholders such as Transport/Highways, Pollution Control/Air Quality and Public Health.

Subject to the nature of the participating public bodies, consideration can also be given to expanding the steering group to include representatives of local transport associations or other local governmental departments such as Legal, Planning, Procurement and any other interested bodies.

Local steering groups should meet on a bi-monthly basis to allow sufficient time between meetings for recruitment activities and scheme development to progress.

The Local Scheme Manager is responsible for overseeing activities of all subcontractors such as Local Scheme Auditors and marketing agencies.



## 4.2 LAUNCH

Prior to launching a local scheme, there are a number of resources that need to be prepared. These include a Local Scheme Website (or dedicated webpages in an existing municipal/regional authority site), Newsletter/Leaflets, Application Form Template and the Member Documents such as Operator Certificate and Vehicle Decals.

Templates for a full set of materials have been developed by the project and would be available to future schemes upon request. Prior to launching a local scheme, there are a number of resources that need to be prepared. These include a Local Scheme Website (or dedicated webpages in an existing municipal/regional authority site), Newsletter/Leaflets, Application Form Template and the Member Documents such as Operator Certificate and Vehicle Decals.

Prior to the launching of a local ECOSTARS scheme, it is recommended that a scheme has a minimum of four to five carefully selected operators already recruited who can act as inaugural members. It is recommended that these should include:

- The local authority's own vehicle fleet.
- A local public transport operator.
- Two or three fleet operators including local haulage, courier or distribution firms and/or waste contractors. This will help ensure good local press coverage.

The launch event for the scheme should ideally be held at the depot of one of the operators recruited during the pre-launch recruitment phase. Subject to the star rating awarded to the operator, if the operator is certified as five stars, it is recommended that the launch event should coincide with the presentation of a five stars trophy/plaque by a local dignitary. If a suitable local depot is not available then a good local landmark with appropriate sized event room facilities and an outdoor area for launch photographs with a selection of members' vehicles can also work well.

It is recommended that the following representatives are invited to attend:

- All inaugural scheme members and key targets for future membership.
- Local press (radio, web, newspaper and television).
- Local politicians.
- Central government departments such as Air Quality, Environment, Health and Transport.
- Transport associations representing freight and public transport sectors who can extend the invite to their local membership.



Prior to or following the launch event, it is essential that a press release be prepared, agreed and circulated to achieve maximum exposure for the scheme. The impact of the press release can be enhanced by quoting important dignitaries within the text (e.g. city mayor).

### 4.3 Local Promotion



Schemes should ideally develop a short Marketing & Communication Strategy with an action plan comprising a series of elements to help increase scheme awareness amongst target audiences. A good marketing campaign can make it easier to recruit new members as the scheme's brand recognition increases.

In addition to establishing contacts with business groups, institutes and trade associations, it is recommended that managers establish contact with national trade press titles, and at a local level, regional newspapers.

Regular press releases should be used to promote the benefits of the scheme with the aim being to recruit further operators who may see the articles. Editorial coverage in the trade press is extremely powerful and will encourage approaches to the scheme from potential members – this should be the aim of any local scheme.

#### **Local website: the public face of the scheme**

Every local scheme should have a standalone website or specific webpages (with a short URL) to act as the face of the scheme. The first thing that any potential member will do before completing a membership application form is to view the website to establish their initial personal view on the scheme. Local scheme websites should include:

- Background information on the scheme.
- Benefits to operators of joining the scheme.
- The application criteria.
- Copy of scheme application form and guidance notes.
- Contact details of local scheme managers.
- A 'Contact Us' form or details.
- Members of the local scheme, with an explanatory profile of the operator, and the overall operator star rating.
- News and other information that will be of interest to scheme members (newsletters, steering group meeting notes and local, regional or national initiative information sheets).



Engaging with key secondary sellers of the scheme is an important way to help make potential members aware of the scheme as well as adding kudos to the scheme from receiving positive support from third-parties. If secondary sellers are engaged with the scheme then a number of potential members will be attracted to the scheme reducing the need to carry out time-expensive recruitment activity.

Secondary sellers may include organisations such as local Chambers of Commerce, relevant industry associations for transport or for specific niche local industries (e.g. in Edinburgh the tourist coach, whisky and hotel support services sectors have been fruitful secondary sellers).

#### **4.4 Member recruitment**

When considering fleet operators to target for recruitment, scheme managers should develop a database of potential operators that they wish to target. The database should focus on fleet operators with vehicles operating within or through the scheme target area. Members of other existing ECOSTARS schemes with depots or a strong operational presence in a new scheme area can also be targeted.

Recruitment should then focus on a prioritised list of operators within the contact database. Consideration should be given to targeting specific geographical areas within the target area, such as Business or Distribution Parks, or by sector e.g. bus and coach operators.

The majority of members who join do so after proactive engagement from the personnel running the scheme. This is a result of reasonably persistent contact by email, mail and telephone followed up by site visits to convert initial expressions of interest in the scheme to full membership.

A small proportion of the scheme members will join as a result of the publicity and marketing surrounding the scheme. This is a positive side effect but cannot be relied upon as the only method of scheme recruitment.

#### **4.5 Auditing and member assessment**

The membership assessment process and road map advice production are conducted by the Local Scheme Auditor.

At the time of the recruitment site visit with the operator to discuss the scheme, and/or complete the application form, the Local Scheme Auditor will explain that as part of the application process, operators may be asked to provide other supporting information to assist with the project level evaluation process.

The scheme supports two levels of recognition – vehicles and operational practices.



The initial assessment is of the vehicles in the operator's fleet, and looks at engine types (EURO Classification), fuel type, fuel efficiency elements, anti-idling settings and in cab driver aids.

The second part of the assessment looks at operating practices that occur within the organisation. The assessment of the operational processes is less quantitative than the vehicle assessment procedure, with operators needing to specify within their application form that their operating processes include the main elements of each of the operational categories:

- Fuel Management.
- Driver Skills Development.
- Vehicle Specification/Preventative Maintenance.
- Operational Support Systems.
- Performance Monitoring and Targeting.

Based on the information contained in the operator's application, and information revealed in discussions with the operator, scheme auditors will draft a bespoke road map of suggested measures. The road map will include suggestions as to how operators can improve the environmental efficiency of their operation through a range of measures based on operational best practice.

## 4.6 Member certification

Certification of new members is the responsibility of scheme managers. The certification includes the provision of the following information to the member:

- Operator Welcome Letter including guidance on how to use the rating in their publicity.
- Operator Certificate confirming the star rating achieved.
- Vehicle Windscreen Decal Discs – each vehicle registration to be added onto vinyl discs with the star rating appropriate for that vehicle.
- Vehicle Body Panel Stickers - if requested by the operator (not essential).





- A copy of the ECOSTARS Member logo (provided electronically) for scheme members to add to their own material (website, letterheads etc).



Once these have been issued to the member the scheme manager follows up with a telephone call to check that everything has been received and to answer any follow-up questions.

New members are given the opportunity to participate in a local press release and given an opportunity for a public presentation of their award certificate (or trophy for 5 star members).

Images and text for the member's profile on the scheme website are also agreed before publication.

## 4.7 Member's services

Schemes should maintain contact with existing members, with follow up calls to be made at a minimum frequency of a 6 - 9 monthly basis. The basis for the follow up phone calls will be to discuss the current status of the fleet, in terms of vehicles and operational processes, and whether there is any content that members might wish to include within Local Scheme Newsletters.

### 4.7.1 Reassessments

All members are entitled to receive free reassessments to track improvements in their performance over time. Fleet re-assessment timescales are at the discretion of the scheme manager, and may be over shorter time durations if significant fleet replacement and/or operational processes and procedures change.

Members wishing to be considered for a fleet re-assessment need to submit both fleet vehicle details, and a copy of the fleet re-assessment application form, detailing changes in vehicles and processes since the original application to join the scheme.

## 4.7.2 Newsletters

Local newsletters are produced on a regular basis. These can be more formal quarterly or six-monthly publications or monthly e-bulletins.

Newsletters are designed to continue the engagement with members and devlier value to them that will translate to further improvements in fuel efficiency. Topics can include:

- Recruitment Updates with details of new members.
- Case studies of members with high star ratings, or representing specific target groups e.g. retail, haulage or community transport.
- Details of other schemes being established at a European or national level.
- News (such as new initiatives or legislation) in the fields of Air Quality, Climate Change, Fuel Efficiency and Freight & Transport.
- Details of events and conferences that members may wish to attend.
- Details of how to have a fleet re-assessment undertaken.
- Local transport policy notices or consultation opportunities.
- Articles focusing on specific fuel saving approaches.

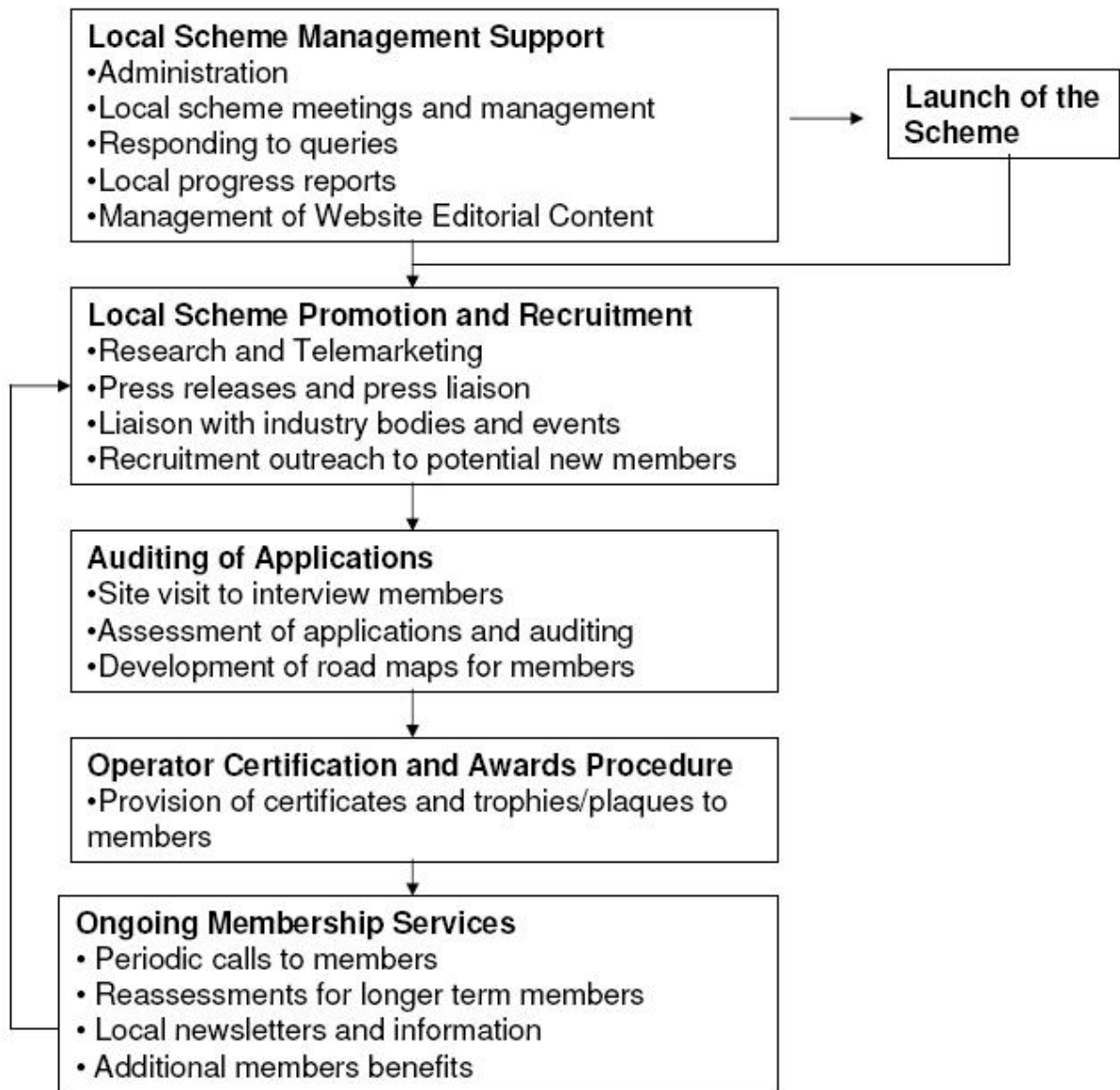
## 4.7.3 Additional Membership Benefits

Subject to the local operating environment, consideration may be given to investigating additional benefits for local scheme members. These might include benefits such as:

- Providing access to priority lanes for scheme member vehicles.
- Preferential or dedicated use of certain loading and unloading facilities.
- Enhanced delivery windows/less restriction on delivery times.
- Consultation and engagement on freight infrastructure and access.
- Subsidised or free driver training courses.
- Seminars/workshops/webinars on best practice in fleet management.



## ECOSTARS Local Scheme Management Processes



## 5.

## Case Study Results

	Edinburgh, UK	Parma, IT	SE Sweden, SE	Cantabria, ES
<b>Scheme area characteristics</b>	City of Edinburgh, Port of Leith and local airport. Major tourist centre and diverse industrial and commercial base.	City of Parma and surrounding Emilia Romagna region. High levels of local industry.	Area contains Blekinge, Kalmar and Kronoberg County. The region is characterised by a few cities surrounded by minor urban areas and large sparsely populated rural areas.	Mixed urban/rural region of Spain including city of Santander with port and airport. A significant tourist centre with a diverse industrial and commercial base.
<b>Local population</b>	480,000	185,000 (Parma)	570,000	600,000
<b>Local partners</b>	City of Edinburgh Council; TTR	InfoMobility Parma; ISIS	SE Sweden Energy Agency; WSP	CTL Cantabria
<b>No. of members</b>	46	30	13	47
<b>No. of vehicles</b>	3,412	3,500	1,103	1,800
<b>Estimated CO<sub>2</sub> saving</b>	12,064 CO <sub>2</sub> tonnes p.a.	10,945 CO <sub>2</sub> tonnes p.a.	3,278 CO <sub>2</sub> tonnes p.a.	5,158 CO <sub>2</sub> tonnes p.a.
<b>Scheme sustainability beyond project lifetime</b>	Continuing using internal budget and Scottish air quality grant funds	Seeking further funds	Seeking further funds and geographic expansion	Continuing using regional govt funding – also greater collaboration with neighbouring Basque region



	Euskadi (Basque), ES	Rotterdam, NE	Ostrava, CZ	South Yorkshire, UK
<b>Scheme area</b>	Major urban/rural Spanish region on core European transport network with large transport sector	A large urban centre with Europe's busiest port	Medium sized heavy industrial city - one of the most polluted urban areas in Europe	Region with four major urban centres; historically heavy industry; large transport sector
<b>Approx. local population</b>	2,155,000	620,000	325,000	1,345,000
<b>Local partners</b>	IVL-LEE	Municipality of Rotterdam	CDV; City of Ostrava	Barnsley Metropolitan Borough Council; TTR
<b>No. of members</b>	29	51	9	87
<b>No. of vehicles</b>	2,220	5,143	1,336	7,200
<b>Estimated CO<sub>2</sub> saving</b>	5,994 CO <sub>2</sub> tonnes p.a.	11,044 CO <sub>2</sub> tonnes p.a.	3,428 CO <sub>2</sub> tonnes p.a.	23,130 CO <sub>2</sub> tonnes p.a.
<b>Scheme sustainability beyond project lifetime</b>	Continuing with regional government funding and collaboration with Cantabria	Continuing with internal budgets and neighbouring authority expansion	Seeking further funds	Continuing with low carbon transport funding from UK government





## 6.

# Project Results

Within the project lifetime the eight schemes successfully engaged with 315 operators who became ECOSTARS members. These 315 operators run a combined fleet of over 25,000 vehicles. The majority of these vehicles are used on a daily basis to make an active contribution to the European economy.

The ECOSTARS evaluation activities identified a combined carbon dioxide saving in the final year of the project of 59,858t CO<sub>2</sub>. In addition to this, the project has inspired a further nine ECOSTARS schemes to be established in the UK, which is shortly expected to rise further.

### 6.1 Feedback from participating fleet operators

The project conducted a survey of member operators in each of the eight case study areas to understand their views and experiences of participating in the local schemes.

When member operators were asked about the main reasons for joining their local scheme, the two most significant primary reasons were; concern about the need to decrease air pollution emissions (28%), followed by the issue of fuel costs (25%). The most popular secondary reason given was the necessity to cut fuel costs (35%), while the benefit of positive public profile seen as the third major aim for them to take part to the ECOSTARS recognition scheme. The majority of members reported that they had considered and part implemented the tailored advice provided to the through their member road map.

Of the different types of measures recommended in the road maps, the most popular type adopted were those to review the procurement specification for new vehicles and onboard equipment as well introducing or reviewing management systems. Over 69% of members had adopted these.

Finally, the scheme members stated that what they gained most from participation was an objective measurement of fleet standards (36%), an increased public relations value from media coverage (31%), a better understanding of fuel costs (20%) and of CO<sub>2</sub> emissions (12%).

In terms of environmental impact of the project, we found that ECOSTARS members have gained:

- A range of savings in fuel consumption from 1.1% up to 5% due to the adoption of eco-driving techniques.
- A reduction in fuel consumption through the implementation of tailored advice given in their road maps from 0.2% up to 10%.
- A fuel efficiency gain of 3.5% where low resistance tyres have been deployed.
- An improvement of more than 8% in fleet management proficiency by using in-cab telematics devices.
- A reduction in fuel consumption of by decreasing the speed limiters from 85 km/h to 83 km/h.



## 6.2 Findings

**Replicability** - On a European level, ECOSTARS established common scheme standards to be applied across the continent by any authority wishing to adopt the ECOSTARS approach.

The various ECOSTARS schemes operate in a local or regional context: fleet operators have become members of ECOSTARS schemes in the areas in which they operate. Some operators can become a member of more than one scheme if their footprint is over a larger regional, national or even international territory, with depot to scheme specific membership.

It has been found that the consistent operational standards across different schemes have encouraged multi-scheme membership (where applicable), which could help additional local authorities to adopt ECOSTARS and establish a way to engage with the respective companies. For example, Edinburgh's members that are national companies, and have a presence in other schemes areas, are also members of one or more of the other UK ECOSTARS schemes which have been established independently from the European project.

Comparing the launch preparations of each ECOSTARS scheme highlights the different conditions and constraints for recognition schemes across Europe. Whilst in some places fleet operators have been anxious at not wanting to be labelled with low star ratings, high ratings are normal elsewhere with operators demanding a higher rating for further recognition (implemented as '5 Star Gold'). It was also clear that fleet operators who joined the scheme were also interested in gaining, in addition to the scheme benefits, some tangible benefit from their association with local authorities.

The scheme can be implemented in any local or regional environment looking to increase engagement with industry. The ready-made scheme is available for application across Europe. The common scheme standards and assessment criteria are available as well as common scheme document templates. Moreover, case studies with first-hand experience can give valuable advice on expected workload and budget estimations.

**Scalability** - In general ECOSTARS can be considered a highly scalable concept that works well in small cities as well as large multi-city urban areas. There is no reason why the scheme could not be applied at a national level.

**Engagement with fleet operators** - An important benefit reported by the participating local government authorities was the way that ECOSTARS opened a new engagement channel with local, regional, national or international operators. Exchanging experiences and viewpoints with and between fleet operators offers great potential to achieve more efficient urban logistics. This is a very useful stepping stone to achieving greater public/private partnerships for delivering efficient and integrated freight transport in urban areas.

**Challenges** - There are perhaps two areas where the scheme worked less effectively than others. Firstly, the SE Sweden scheme was established to identify how well the scheme would work in a largely rural area. This scheme reached more members and vehicles than were originally targeted but based on the population size of the region it has not grown as large as might be expected in comparison with other schemes. The key reason for this is the large geographical area with few urban centres to focus scheme recruitment efforts on.

The second area where scheme effectiveness was inconclusive was the Ostrava scheme in the Czech Republic. There are a number of factors which could be the cause of this – historical resistance to participating in public initiatives, economic state of transport sector, base level of vehicle and operational efficiency; and the skillsets of the partners involved in delivering the scheme.

**Longer term experience** - The scheme in South Yorkshire was supported by the project to explore what happens in the longer term with a scheme – would the scheme growth continue at the same rate, member continue stay actively engaged and political support be retained.



An excellent finding was that scheme recruitment in South Yorkshire has continued to become more rapid over time. This is a positive sign that the scheme concept has longevity (over five years of operation) and that value can continue to be delivered to existing members. Political support has continued to grow as well with interest and public support from all levels of government.

The three main reasons identified for the continued growth in South Yorkshire are:

- i. *Greater brand awareness* increasing awareness of the ECOSTARS scheme means that companies have become more receptive to joining the scheme over time, and trade associations and industry bodies have become more supportive.
- ii. *Length of decision-making time by some companies.* It has been found that some organisations, particularly public sector ones can take years to make a decision on whether or not to join the scheme. Therefore, over time more of these ‘slow’ decision makers convert into new members.
- iii. *The growth of other schemes in the UK.* This is connected to point (i) above - greater brand awareness. It has been found that recruitment of an operator for one scheme (for example, Nottingham) may identify that they have a local operational presence in South Yorkshire. That means easier recruitment for a further member. Effectively the more schemes there are then the larger the overall combined recruitment budget.

These are lessons which can be applied by the other schemes which are continuing beyond the project lifetime.



### 6.3 Beyond the European project

An important aspect of the project has been to promote the results beyond the eight case study areas to encourage other cities, regions and major transport operators to adopt the common scheme standards approach offered by ECOSTARS.

As of May 2014 there have been a further nine schemes established in the UK in different regions and cities:

- City of Dundee
- City of York
- Falkirk
- Greater Nottingham
- Mid Devon District
- North Lanarkshire
- Sefton Borough (Port of Liverpool)
- Thurrock
- Warrington

A further four authorities in the UK have been awarded funding to establish their own local schemes – Fife, Glasgow, South Lanarkshire and London Borough of Sutton. These will launch during 2014/15.

The project has also received a number of enquiries from consultancies and authorities in Italy, Spain and Lithuania regarding the suitability of deploying ECOSTARS in their region to help reduce the impact of transport related air quality and improve the economic efficiency of the transport fleet sector. To date none of these enquiries have resulted in the implementation of a scheme with the main barrier being the access to initial funding to develop and launch local schemes in these locations.

**Delivering a legacy** - One of the positive experiences in the ECOSTARS project has been the strong legacy which the project has been able to provide. This has been achieved through the following activities:

- Annual local scheme plans which reviewed the previous twelve months and planned for the future – including how the local scheme would become sustainable after the end of the European funding period.
- Comparison of local scheme plans for sustainability in all project consortium meetings from the midpoint onwards.
- Establishment of a six-monthly decision making forum that will continue to bring together Local Scheme Managers to further develop and promote the scheme concept.



- Meeting with those third party organisations who expressed an interest in running their own local ECOSTARS schemes.
- Translation of all scheme materials into the local languages of project partners.
- Development of a Memorandum of Understanding which all new schemes sign up to to ensure that the core principals of the common scheme standards will be adhered to.





## 7.

# Conclusions & Recommendations

The results of the project are seen by the consortium partners, the project reference group and our local scheme stakeholders as very positive. Those project partners who have had experience in multiple European projects value their involvement in this 'high impact' project.

The ECOSTARS concept has proven to be very transferable with the only question mark being over the effectiveness in a central/eastern European context. Further pilot schemes in these areas would be needed to understand if the limited growth in the Ostrava scheme was specific to the nature of that scheme and the delivery partners involved or if it related to a possible wider cultural reluctance by private transport operators to be involved in a public sector led initiative in that territory.

The project has provided added momentum to activities already identified for improving local air quality. Both the funding and the discipline of targets have been very useful at driving this forward.

The project has also supported a transition period for the ECOSTARS concept, from where it has been a single local scheme with interest from other cities and regions to operating in 17 locations with increasing interest.

Importantly, all partners also report a broadening in staff skills in areas such as transport, low emissions and fuel efficiency practices. It has helped build a bridge between the public authorities and the private sector (particularly the freight and logistics sector) which is being used for other discussions and mutual benefits.

### The key recommendations from the project are:

- 1. ECOSTARS should continue to be promoted to cities and regions across Europe as a cost effective measure for tackling air quality, improving fuel and economic efficiency.**
- 2. It is best delivered in conjunction with other sustainable transport measures – particularly other urban freight policies, where it can act as a catalyst to greater dialogue between the public and private sectors.**
- 3. The case for applicability to Central and Eastern Europe is not yet proven – further trials in this area would be beneficial.**
- 4. Additional and continued public funding should deliver further growth in membership and in scheme numbers. A lower value Intelligent Energy Europe STEER Activity Fund could be a means to deliver this.**





## 8. Contact Details

For more information on the ECOSTARS Europe project or the ECOSTARS scheme in general please contact the Project Coordinator at TTR via email on [ecostars@ttr-ltd.com](mailto:ecostars@ttr-ltd.com)

