

Tool Kit:

There are a variety of tools available to help individuals and companies in their efforts to reduce their environmental impacts and transition to smart energy practises. Whilst the list below is not exhaustive, these tools include:

Buying

Truck Buyers Guide www.truckbuyersguide.gov.au

Can be used for all truck types however designed mainly for (GVM 3.5-12 tonnes). The Truck Buyers Guide is a joint Victorian, NSW and Australian Government initiative to promote the understanding and uptake of low emission small trucks. Choosing a small truck can be a complicated exercise - this guide will help you understand the things you should look for and help you choose a truck with the best fuel economy.

Green Vehicle Guide www.greenvehicleguide.gov.au

Allows you to compare makes and models for all vehicles and includes a Fuel Calculator for annual fuel consumption and CO₂ emissions.

Green Truck Partnership www.rta.nsw.gov.au

An alliance between the Roads and Maritime Services (RMS) and the road transport industry. The Green Truck Partnership Commission agreed independent testing of products that claim to improve environmental performance of heavy vehicles. The purpose of this testing is to assist road transport operators make an informed decision when purchasing products to improve the environmental performance of their heavy vehicle(s).

Eco-Driving

Eco Driving in the Australian Context: The EcoDrive Research Study <http://www.racq.com.au>

A report that provides an assessment on what strategies are effective in supporting long term driving related behaviour change to increase fuel efficiency.

The CleanRun EcoDrive toolkit www.dec.wa.gov.au

Provides drivers and driver trainers with the information and tools to implement CleanRun Eco Drive in their organisation. The website provides templates, calculators, worksheets and other resources to be able road freight operator to work through a structure eco-driving program in their organisation.

Drivers Education Centre of Australia www.deca.com.au

DECA provides training programs which are specifically designed to encourage driver behavior that improves fuel economy and reduces vehicle emissions. They offer two Fuel Management driver training programs:

- Using clients own vehicle, or
- DECA's driving simulator

On completion of the training program, drivers are provided with a report outlining their performance to determine the effectiveness of the training on their fuel efficient driving practices.

Best Practise

United States EPA Smartway Program Resources www.epa.gov/smartway/

Provides information on a range of transport and logistics sustainability concerns and is aimed at helping businesses move goods in the cleanest most efficient way possible. Since 2004, SmartWay partners have eliminated 51.6 million metric tons of CO₂, resulting in savings of 120.7 million barrels of oil and \$16.8 billion in fuel costs.

National Carbon Offset Standard www.climatechange.gov.au

provides guidance regarding the processes for measuring a carbon footprint, putting in place an emissions management plan and offsetting emissions with certified carbon credits.

Tool Kit:

Best Practise cont.

Good Practice Source Book - www.cbfc.com.au

Published by the Victorian Freight and Logistics Council provides a resource for customers and suppliers of freight and logistics services to work towards greater sustainability in the industry. It provides potential pathways for industry members to implement sustainability with diverse and detailed case studies of different initiatives.

Energy Efficiency Opportunities www.energyefficiencyopportunities.gov.au

Public Reports provide useful insight into the initiatives being implemented by some of Australia's largest companies. Designed to assist corporations to improve their energy efficiency and to maximise their benefits from participating in the EEO Program. Resources are grouped by industry sector to better enable corporations to access information relevant to their business and processes.

5 Star Sustainability www.5starsustainability.vic.gov.au

A free self-assessment benchmarking tool for businesses to provide high level information and advice for proceeding to more sustainable operations.

The Energy Efficiency Exchange www.eex.gov.au

The EEX supports the implementation of energy efficiency practices within medium and high energy-using companies. It shares best-practice information on energy efficiency, case studies and resource materials from Australia and overseas.

Rail

Sustainable Design Guidelines for Rail www.transport.nsw.gov.au

The report highlights a series of guidelines that Transport for NSW have identified as part of a continuing process of achieving sustainable best practice for rail.

Shipping

Sustainable Shipping Initiative www.forumforthefuture.org

The Sustainable Shipping Initiative (SSI) brings together some of the biggest names in the maritime sector to plan how it can contribute to - and thrive in - a sustainable future

Sea Transport Efficiency and Greenhouse Gas Emissions www.asa.com.au

This report produced by the Australian Ship-owners Association focuses on the efficiency and greenhouse gas emission by the sea transportation industry in Australia and contains a number of important directions for shipping.

Measuring Tools

How to record your CO2 emissions

One litre of diesel fuel produces 2.7kg of carbon dioxide when burnt as fuel for your vehicle's engine. It also produces a significant amount of particulate pollution and a range of toxic gases. Understanding this record your odometer reading when next putting fuel in the tank.

- Record the number of litres used to fill the tank.
- Next time fuel is next added to the tank, record the odometer reading and litres per tank again.
- Subtract the first odometer reading from the second odometer reading. This tells you the kilometres travelled between fuel top ups.
- Next divide the kms travelled by fuel consumed. This gives the litres of fuel used per kilometre.
- Multiply this number by one hundred to learn L/100kms.

Eco Calculators can be found at www.dec.wa.gov.au

Measuring Tools cont.

Annual fuel costs calculator www.environment.gov.au

A handy guide to calculate the annual fuel costs for different cars

Waste Management Association of Australia www.wmaa.asn.au

WMAA has provided a calculator tool for assessing the comparative greenhouse gas impacts of waste collections based on fuel types and collection frequency, with the option to tailor the details of the routes to give outcomes normalised to different metrics. This tool is available to WMAA members only.

Energy Analytics www.ener-lytics.com

provides asset performance management tools and systems for asset intensive industries. The tool ranges from a simple energy tracker, to highly customised analytics paired with sub-metering.

EcoDesk www.ecodesk.com

Provides a free platform for creating and managing a sustainability platform for a business, and sharing information with over 100,000 other corporate users. Eco-Desk represents a potentially low cost entry for organisations to improve and manage their sustainability information tracking. Through Eco-Desk users can access the EcoDrive Software developed by Adromeda and Linfox.

Greenhouse Gas Protocol's www.ghgprotocol.org

Corporate Standard provides guidance on the entire inventory development process. It brings together a number of tools that have been extensively tested by industry experts.

EcoPassenger and EcoTransIT www.uic.org

Provide means to compare the energy consumption, CO₂-e and exhaust atmospheric emissions for planes, cars and trains (and trucks) in Europe.

Network for Transport and Environment (Stockholm) – Basic Freight Calculator www.ntmcalc.org

The environmental performance of transports is determined by several factors. In the Freight Calculator, only a few of those factors are used. The calculation is based on scientific data for default vehicles and load factors. How much emissions occur is even influenced by the weather, driving style, vehicle maintenance, type of motor etc. Therefore, results of these calculations have to be seen as an indicator of the magnitude of the environmental impact of freight transports and not as exact information.

The 6P Green www.6pgreen.com.au

The 6P Green program provides a comprehensive introduction to organisational sustainability. It includes a series of workshops, energy auditing, and recommendations and actions to form the framework for an Environmental Management System.



And remember to check out SAFC's Green Freight Report to examine your business's opportunity to improve its environmental performance.

Available at
www.safreightcouncil.com.au

Others to Note

Country	Name	Web address	Comment	Industry Sectors covered
AUS	EcoStation	http://www.ecostation.com.au/	Provides a comprehensive resource centre for the freight industry to assist freight transport and logistics business to minimise environmental impact and maximise performance efficiency. Includes resources for measuring and reducing emissions; a fleet assessment tool to assist with the calculation of vehicle emissions and strategies to reduce emissions - alternative fuels, alternative drivetrains, fuel efficiency technologies, environmental driving and idle reduction.	Some case studies available from Australia and the US on reducing emissions.
AUS	Zero Waste SA	http://www.zerowaste.sa.gov.au/	Zero Waste SA will work with industry to identify ways to improve operational efficiencies and adopt a more sustainable mind set. Does host case studies on collaboration with the manufacturing and food and wine industry Adelaide Airport.	Case studies on: Manufacturing, Travel Food and wineries.
NZ	Energy Efficiency & Conservation Authority NZ	http://www.eeca.govt.nz/	A very useful website includes dedicated sites for commercial and home use. Has an energy efficiency star program for products and an energy enduse database using 2012 data that links to resources and case studies across a broad range of energy efficiency and conservation topics.	Residential, small business, central and local government, schools, and larger commercial organisations
NZ	Energy Efficiency & Conservation Authority NZ - Business	http://www.eecabusiness.govt.nz/	Provides resources for industry: How to develop an energy management Policy and Plan; differentiates between heavy vehicle and light vehicles in promotion of energy efficiency; provides diagnostic tool for business with energy bill in excess of \$250k and much more	Small business, larger commercial organisations - industry example include wine production, transport, dairy farm etc
UK	Department of Environment, Food and Rural Affairs	https://www.gov.uk/measuring-and-reporting-environmental-impacts-guidance-for-businesses	Provides information and web tools to assist small business to measure greenhouse gas emissions and report on the environmental impacts of their business. Website provides a lengthy document provides specific guidance for freight transport operations.	all business small and large with application that may also assist residential use
UK	Freight Best Practice	http://www.freightbestpractice.org.uk/	Information is provided to assist road transport operations reduce emission with the focus on improved efficiency. Freight best practice covers: saving fuel; Developing skills; equipment and systems; operational efficiency and much more.	Website is directed at all involved in freight distribution in Wales.
UK	Green Dragon Environmental Management Standard	http://www.greendragonems.com/index.html	Green Dragon is an Environmental Accreditation organisation certified by the United Kingdom Accreditation Service (UKAS). A range of resources are provided to support the business through the accreditation process that relies on a holistic view of environmental management across a business.	a holistic view of environmental performance that doesn't single out a particular industry or sector
UK	Carbon Smart	http://www.carbonsmart.co.uk/	Assists business with reporting and communication around sustainability to meet statutory requirements and to market business, can also assist with improving efficiency and building operational sustainability.	Case study areas: waste management, energy management and reporting
UK	Carbon Footprint	http://www.carbonfootprint.com/	A carbon calculator is available on the site that is free for small and medium size business - the calculator can be downloaded as an app. Provide a tool to assist in the calculation of emissions factors for life cycle assessments and e-learning tools. Have designated resources to assist with the measurement of the supply chain footprint.	All - provide services dedicated to supply chain footprinting
USA	Best foot forward	http://www.bestfootforward.com/	Website includes a number of case studies the most recent tackling agricultural emissions with the cool farm tool. The cool farm tool developed by best foot forward for not for profit org to assist farmers to calculate emissions available via the following link http://www.coolfarmtool.org/ . This tool has been used internationally and case studies are available.	Specific information across the following sectors: food and agriculture & retails.
USA	United States Environment Protection Agency (EPA) - Diesel Emissions Reduction Program	http://www.epa.gov/otag/diesel/index.htm	Information and resources are provided on retrofitting devices to existing vehicles. A Diesel Emissions Quantifier interactive tool for medium to large size diesel engines is available to assist business to evaluate clean diesel projects by estimating emissions reductions, cost effectiveness and health benefits.	Covers off on all modes of transport and is there for applicable to all industries that require the the transportation of goods.
INT	Partnership on Sustainable low carbon transport (SLoCaT) - Resources	https://www.slocat.net/	The site is linked to two external sites, Business Monitor Online (payment required) dedicated to the analysis of global freight and shipping markets providing research on leading air, road and rail freighters worldwide and key industry performance measures and ENFORCE a consultancy providing training and supporting tools, a monitoring and reporting platform and a framework for closer collaboration between shippers and carriers.	Heavily focused on road transport
SWE	Network for the Transport and Environment	http://www.ntmcalc.org/index.html	Basic calculators for freight and travel are available along with resources relating to transport procurement, fuels and a library resource. Access to more detailed, methods, data and library are available to members.	Freight Transportation, Travel, Transport procurement and fuels