

Grasshopper Environmental

Safety, sustainability and productivity:
triple treat drives business success

CASE STUDY



Fleet: 22
Staff: 50

Case Study:

Grasshopper Environmental shows safety focus can drive business success

Organisation: Grasshopper Environmental

No. of drivers: 22

Staff: 50



Key outcomes

- Organisations don't have to choose between safety, sustainability and productivity – each complements the other and investing in all helps drive business success
- A partnership approach leads to better safety outcomes, both within a company by encouraging drivers to raise concerns and working with clients to address safety challenges on-site
- Passion, problem solving and perseverance can lead to innovative bespoke solutions to safety issues where no 'off-the-shelf' solution or template exists
- Maintaining a modern, up-to-date fleet increases 'bang for buck' in safety performance, keeping drivers and other road users safer while contributing to the bottom line by reducing crashes and increasing productivity
- Vehicle-specific training for drivers, delivered by manufacturers, helps drivers better understand and utilise the safety features of modern vehicles
- Clients are increasingly expecting high levels of safety performance and specific safety requirements, particularly around fleet and driver competency, are becoming more commonplace in industry, particularly on large infrastructure projects

Synopsis

Safety, sustainability and productivity cannot only co-exist but are complementary forces that drive business success. For Grasshopper Environmental, this combination has improved safety and environmental performance while driving bottom line benefits and fueling success in winning major contracts.





Introduction

Successful companies do not need to choose between safety, sustainability and productivity.

Longstanding waste management company Grasshopper Environmental is proof that organisations can achieve all three at the same time. In fact, this approach has been the cornerstone of Grasshopper Environmental's continued success and longevity since it began operations more than 40 years ago and, in recent times, a key factor in it being selected to work on several large-scale projects.

Operating in the waste management sector, and providing services that include recycling and waste-to-energy, sustainability and sound environmental practices are central to the company's operations.

However, it considers sustainability and productivity to be clearly linked, and that safety is strongly connected to both, with the three factors combining to create a proactive workforce that delivers for clients on all fronts.

'You don't need to compromise on one to meet the other – they all work together,' is how Grasshopper Environmental management put it. One prime example is the company's focus on ensuring its fleet is kept up to date. Modern trucks meet the highest emissions standards, operate efficiently and include the latest safety features.

So they maximise sustainability and productivity while helping deliver high levels of safety performance among Grasshopper Environmental drivers, and for other road users who interact with them.

In turn, safety features make trucks easier to drive and assist drivers to monitor blind spots and other road safety challenges, reducing fatigue for drivers and contributing bottom line benefits.

Importantly Grasshopper Environmental management works in partnership with its drivers when it comes to workplace and road safety. As the workers on-the-ground, encountering and observing on-site safety risks, drivers are given a voice and encouraged to raise concerns they believe must be addressed to increase safety for all parties involved.

Organisation overview

Grasshopper Environmental Pty Ltd has been providing professional, tailored and responsive waste management and recycling services since 1978 across two major sectors in Sydney: Building and Demolition, and Commercial and Industrial.

Grasshopper Environmental services anywhere from the Sydney metropolitan area to the Blue Mountains and surrounding regions from its Arndell Park headquarters in the city's eastern suburbs.

Its fleet of 22 trucks, including front, marrel, and hook lift configurations, service clients ranging from Tier 1 construction and government to hospitality, retail, manufacturing, medical and industrial premises. Its portfolio of projects includes Sydney Light Rail, Central Station upgrade, Sydenham Station, Hornsby Hospital, Western Sydney Airport and the new Sydney Zoo.

The business is passionate about environmental sustainability and compliance, ensuring its waste management plans and services, which include recycling and waste-to-energy, are as sustainable as possible.

Resource recovery, ethical waste management and complete environmental compliance has underpinned its commitment to environmental sustainability for 40 years and has been a key reason so many organisations have chosen to partner with the company.

Grasshopper Environmental is Green Star and ISO 9001, 14001 and AS/NZS 4801 accredited as well as being a member of the [Infrastructure Sustainability Council of Australia \(ISCA\)](#), accolades that are recognised as markers of quality for sustainability excellence.

By focusing their efforts on environmental sustainability, Grasshopper Environmental aims to better contribute to a circular economy and a brighter waste-free future for Australia.

Delivering safety performance

Like all companies who operate a heavy vehicle fleet, fatigue is a key workplace and road safety risk Grasshopper Environmental must address. Likewise, fleet condition and drivers' fitness for work are common general safety considerations to be managed and minimised.

However, the diversity in waste management services provided, and the fact specific vehicle configurations are required for particular tasks, means the company must also provide bespoke safety solutions for specific challenges that are encountered across myriad work sites.

In addition, Grasshopper Environmental's success in winning contracts for major projects is often dependent on meeting stringent safety standards, highlighting the importance a high level of safety performance plays in the success of the business.

In Grasshopper Environmental's case, the company has found recent major project 'wins' have reinforced that its approach to safety is already at a high level. With the Sydney Metro project, for example, the company found it had most of the required safety measures in place across its fleet and workforce (see 'Winning Ways').

It also sees large scale projects as an opportunity to define what it stands for as a company, going above and beyond specific requirements to ensure safety is maximised across all its operations rather than simply ticking off each contract stipulation.

This case study will briefly outline Grasshopper Environmental road and workplace safety measures, how they've been implemented and communicated to drivers, and whether there are any bottom line benefits that translate into a productive and successful operation.



Winning ways

Major projects on board

Grasshopper Environmental's safety performance has played a key role in the company increasingly winning waste management contracts on large-scale projects, which often come with stringent safety requirements and high expectations of safety performance.

That includes several large transport projects, including Sydney Metro, 'Australia's biggest public transport project'.

The project brings with it fresh challenges for Grasshopper Environmental, but working together internally, and with Sydney Metro, Grasshopper Environmental developed a waste management system that effectively delivers on site safety, sustainability and efficiency while meeting the waste objectives of the project.

In particular, Sydney Metro stipulates several heavy vehicle safety requirements for subcontractors to work on the project, including blind spot minimisation, side underrun protection, telematics, and reflective markings and warning decals. Drivers are also required to complete a one-day Sydney Metro driver induction.

Sydney Metro has become an example of how major projects can effectively influence the safety of the supply chain.

In Grasshopper Environmental's case, project requirements for Sydney Metro confirmed that the company was already performing at a high level when it came to safety. Additional requirements to comply were limited to reflective safety warnings on side underruns for all vehicles, and drivers attending the driver induction.

Reflecting Grasshopper Environmental's attitude of maximising safety outcomes rather than simply meeting minimum requirements, the company implemented safety decals and camera systems across its entire fleet, and had all drivers complete the driver induction training.

Drivers were trained and familiarised with new safety features introduced to all vehicles, and how they contributed to reducing on-site safety risks. In addition to the driving team, Grasshopper Environmental's Allocations, Operations and Customer Care team all developed a thorough understanding of the requirements of the project and the deliverables of the project waste management plan.

Grasshopper Environmental also provided representatives for the project safety working group, hosted by Sydney Metro.

Grasshopper Environmental believes the significant safety requirements are no impediment to project delivery. In fact, they helped the company realise it met three-quarters of Sydney Metro's requirements without further modifications.

In that way, the project presented an opportunity to 'formalise' safety measures in place and formally consider its safety performance objectives.

Grasshopper Environmental says the Sydney Metro standard is becoming well known in industry and is fast becoming the benchmark that other clients are requesting.

The company also believes additional safety requirements impacted drivers and staff positively by generating greater awareness of safety concerns on project sites and increasing its workforce's awareness of client concerns associated with waste management and hazards identified on site.

The bottom line

While the Sydney Metro experience reinforced Grasshopper Environmental's approach to road and workplace safety performance, it also demonstrated the link between a focus on safety and business success.

Other measures that track its safety performance also show that safety is translating into bottom line benefits for Grasshopper Environmental.

In particular, eliminating 'bumps and grazes' on trucks help protect what is an expensive asset, and cameras and other safety features on trucks have also improved efficiency by allowing drivers to manoeuvre trucks into smaller places without causing even minor damage. In-house developed, tailored driver training is also contributing to productivity improvements.

Safety in place

Driver fatigue

Grasshopper Environmental is vigilant in reducing risks that could adversely impact the safety of drivers, road users and the wider community.

One of the key workplace and road safety challenges it must manage is driver fatigue. While this is a common issue for heavy vehicle operators in any industry, Grasshopper Environmental understands that operating vehicles is a driver's main role, day in day out, so has systems in place to address fatigue as a high priority.

For example, maximum work hours set for drivers and allocated rest breaks follow National Heavy Vehicle Regulator (NHVR) standards and are monitored using in-truck telematics data. Allocating and rostering of drivers also follows limits set out in legislation.

The company ensures both management and drivers can demonstrate competency in fatigue knowledge, relevant to their position, on the causes, effects and management of fatigue. It also has internal review measures to manage compliance with its fatigue management system and conducts regular driver performance and medical reviews.

In addition to daily monitoring of rest breaks to ensure drivers are 'fit' to safely meet daily demands, Grasshopper Environmental goes further in at least two areas.

Given the requirement for heavy vehicle drivers to have a zero blood alcohol level, Grasshopper Environmental performs random alcohol and other drug testing. While there is no legislative requirement to test, and it is an extra financial impost, testing gives the company peace of mind while sending a strong message to drivers – and clients and the community – about the importance the company places on safety.

While expectations are clearly explained to drivers, Grasshopper Environmental also maintains an 'openness' with drivers and a work environment where drivers are encouraged and comfortable to approach management with safety concerns, criticisms and feedback, so required changes can be made as necessary.



Driver training

Another area where Grasshopper Environmental goes above and beyond in safety is ensuring that all drivers undergo full training in the safe operation of Grasshopper Environmental fleet vehicles. While driver training is common in the transport industry, there are no formal training programs or governing bodies covering waste management vehicles and the lifting devices the industry uses.

Rather than see this as an impediment, Grasshopper Environmental develops and delivers its own purpose-built in-house driver training, with training provided tailored to vehicles being operated, the requirements of the job, and safety requirements.

The company's Fleet Manager is heavily involved in all aspects of driver training, which has a strong emphasis on face-to-face practical delivery in the trucks themselves.

New drivers are placed with senior drivers to undergo comprehensive training in the safe operation of vehicles and safety features, lifting units, compactors, and familiarisation of safety zones.

In addition, drivers undergo site specific training and attend toolbox meetings that address safety items as well as monthly safety specific meetings that address particular challenges, such as load restraint and spill management.

Training also extends to ensuring drivers are aware of all the safety features included on the modern trucks they drive, and how to maximise their value. Each vehicle brought into the fleet is allocated to a driver and that driver then receives first-hand one-on-one training from the vehicle's manufacturer to identify and demonstrate the truck's safety features, such as adaptive cruise control or lane assist.

Fleet standards

Supplying modern, well-maintained vehicles for drivers to deliver waste management services is another fundamental tenet of Grasshopper Environmental's approach to workplace and road safety – and business – performance.

The approach means vehicles in its fleet include the latest safety features, such as adaptive cruise control that automatically slows the vehicle or speeds up with traffic, and Lane Assist, which provides an audible alert if a vehicle drifts out of its lane.

In addition to standard safety features, Grasshopper Environmental goes above and beyond to ensure vehicle safety features are in line with best practice. This includes ABS brakes and forward and reverse facing in-cab cameras that monitor driver behaviour and increase driver visibility of blind spots. As well as directly increasing safety, such features also make driving a truck easier, decreasing driver fatigue as the truck itself is helping to monitor road hazards, such as blind spots and other vehicles and pedestrians. Grasshopper Environmental has also designed, manufactured and fit side underrun protection to all its fleet vehicles to prevent entry under the vehicle (see breakout box).

When it comes to mass compliance, Grasshopper Environmental runs an Accuway onboard scale system to monitor axle weights and total GVM to ensure vehicles remain within legal weight and mass restrictions, and its scales are calibrated every six months for accuracy.

Necessity and invention

Side underrun protection systems prevent other road users from sliding under a truck in a collision.

In Grasshopper Environmental's case, the company understood the importance of the systems as part of a comprehensive safety approach. The features are also often expected as part of safety requirements on large-scale projects.

However, because of the specific nature of Grasshopper Environmental's vehicle fleet, a universal off-the-shelf solution was not an option. So, led by the Fleet Manager, the company devised its own solution, designing and manufacturing the brackets that attach side underrun systems to its trucks.

The Fleet Manager designed a prototype and, after extensive testing, the company came up with a solution that negotiated the challenges it faced, such as 'running' the brackets around items on the truck, as well as meeting modification requirements, such as limits on welding to a chassis.

Maintaining standards

Another key road safety challenge Grasshopper Environmental effectively manages is the management and upkeep of its fleet to adhere to safety standards set out by NHVR as well client requirements for on-site safety.

Grasshopper Environmental is accredited in Maintenance Management, an accreditation granted under Chapter 8 of the Heavy Vehicle National Law (HVNL) to operate under the National Heavy Vehicle Accreditation Scheme (NHVAS) Maintenance Management module.

Accreditation requires the compliance, auditing, and passing of eight Maintenance Management standards including fleet maintenance, checks, repairs, record keeping, and driver education.

Fleet maintenance itself is performed by professionals from vehicle manufacturers, under service agreements in place with each manufacturer for each individual vehicle. This system also highlights when vehicles are due for regular service and maintenance.

This is in addition to the company's own internal monitoring and fleet management system – Fleetio. While Fleetio also highlights when vehicle maintenance is due, its main function for Grasshopper Environmental is allowing drivers to complete pre-start inspections and highlight safety and other areas that require action.

Drivers enter faults identified in their inspections into the Fleetio system. If the 'fail' is a small issue, such as a light bulb, they will likely receive an advisory to simply fix it. If it's a larger issue, such as the perennial heavy vehicle industry issue of tyres, the vehicle will be repaired and re-enter service, or be grounded until the fault is fixed.

The safety benefits of a modern, up-to-date fleet also flow into productivity and sustainability advantages for the company. Regularly updating the fleet minimises maintenance costs and increases efficiency, while newer trucks also comply with Euro V or Euro VI emission standards. The company also believes quality of the fleet reflects the pride a company takes in one of its key assets, which reflects the pride it takes in the services it delivers.

Data, driven

Similarly, back-to-base vehicle GPS tracking and monitoring also generates multiple benefits for the company from a single measure.

The system monitors speed, harsh braking and rest breaks, helping the company comply with legislative requirements.

From a business perspective, location data allows the operations centre to provide accurate delivery and arrival times for clients as well as providing time-on-site information to inform Grasshopper Environmental operations.

From a safety perspective, the four-way camera system on each truck also provides a live feed back to base, so if there is an incident or a vehicle has been idle for a long period, the company can remotely check if assistance is required.

Importantly, data generated via monitoring is used to highlight areas where drivers, either individually or as a group, may require further education, with regular reports generated providing information on driver performance, highlighting if sharp cornering or heavy braking or acceleration, for example, has occurred.

Issues highlighted are then raised, where necessary, in regular toolbox and monthly safety meetings.



Communicating safety

Drivers are also encouraged to highlight safety issues themselves, either in vehicles or on site, with Grasshopper Environmental management taking the view that safety is everyone's responsibility.

In particular, if drivers begin a new job or are servicing a new site, they are encouraged to approach company management if they observe any issues or concerns.

Grasshopper Environmental always performs an occupational health and safety assessment of a new worksite, even before a waste management plan is drawn up. Assessments also consider the specific vehicles and plant that will be required for the job and risks particular to that equipment and its specifications, such as height and width of bins to be used.

The final assessment is shared with drivers servicing the site, so they are aware of issues or risks to look out for before they even leave for a job, and drivers are provided notes for each delivery. If a risk has not been flagged as part of that process, or a new risk emerges, drivers are encouraged to raise it immediately.

This focus on communication and an 'open environment' allowing drivers to provide direct feedback is a key foundation of Grasshopper Environmental's approach to road and workplace safety. As the company recognises, drivers are the workers 'out on the road, in the actual worksites'.

This recognition that drivers are the company's safety frontline is further reflected in incentives provided for driver performance, including the Driver of the Month award and bonus schemes that reward meeting specific criteria in a safe manner.

In turn, such incentives reinforce that safety is a priority that is considered in everything the company does, and that safety is a journey not a destination.

Key learnings

Progressive approach

This commitment to constantly improving safety is one of the key learnings Grasshopper Environmental has taken from its continuing safety journey.

In particular, for a company who works at a diverse and growing number of sites, this recognition reflects the need to remain vigilant and constantly assess safety concerns specific to each site as well as evolving risks as projects progress.

A project site can change dramatically over a short period and a range of safety issues may need to be addressed over the life of a project.

The company has found the increased safety outcomes that come from this approach has created a more positive workplace and stronger relationships with customers.

Partnership approach

Those strong relationships fuel the partnership approach that has become another hallmark of Grasshopper Environmental's approach to workplace and road safety, benefitting the company as well as clients.

One large project example of this was the company being part of the safety working group hosted by Sydney Metro, where potential dangers are identified and the group works together to provide solutions for the safety of staff, contractors and the community.

This partnership approach also develops company and worker understanding of risks and hazards and measures it can incorporate to achieve a greater level of safety, for specific projects as well as across all its operations.

Feedback approach

The partnership approach also creates an open dialogue between client and company, allowing both to work together towards the common outcome of improving safety performance.

This relies on all parties being open to giving and receiving feedback, both within the company and between it and customers.

Just as drivers are encouraged to inform management of any safety concerns they see, in Grasshopper Environmental operations or on-site, two-way communication between the company and clients creates an environment where the need for change can be acknowledged and acted on.

While attitudes to safety in the heavy vehicle industry are improving, Grasshopper Environmental also believes that having an open mind and being able to accept the need to change is also critical in improving safety across the industry as a whole.

Complementary approach

Safety, sustainability and productivity are connected and complementary. Grasshopper Environmental's approach demonstrates that fostering all three simultaneously is an investment in business success, not an impost on the balance sheet.

Whether it's investing in the quality and maintenance of the fleet, tailoring training to driver need, devising innovative solutions specific to their vehicles, or installing four-way camera systems or other tracking in their trucks, more than 40 years of operation and a growing list of major project customers demonstrates the wisdom of Grasshopper Environmental's coordinated and comprehensive approach to workplace and road safety.

