



RESOURCE MANAGEMENT ASSOCIATION SCOTLAND

Removal of Entitlement to use Red Diesel From April 2022

Impact on the SME Resource Management Sector in Scotland

www.rmascotland.co.uk

Executive Summary

RMAS members took part in a recent survey to explore the impacts of the loss of exemption of red diesel on the Sector and what is needed to support the transition to alternative greener fuels. The loss of exemption will see members have no alternative for the majority, of plant and equipment to switch from red to white diesel which will have significant financial, operational and investment impacts on RMAS members, their customers, suppliers and contractors.

For individual RMAS members it has been estimated that the average annual red diesel consumption is ~445,000L, the loss of exemption will result in a doubling of costs, with an associated average increase expected from £203,000 to £470,000 per annum.

Many RMAS members have considered shifting to alternative fuels, such as electric, biogas, hybrid and biodiesel. However, for the majority, of all mobile static and process plant and equipment which currently run-on red diesel, options to switch to alternative fuels are extremely limited and still several years away. This is primarily due to the lack of viable alternatives which meet the power, torque and operating time requirements associated with managing heavy loads of waste and recycling.

Some suppliers are exploring power-bank technology where multiple banks can be charged and swapped in and out of equipment to allow for continuous operations, however this technology is in the early stages of development and is several years away from market. Hybrid equipment which can trickle charge the engine for mobile plant is also being developed by some suppliers.

RMAS are calling for the switch to alternative greener fuels to be introduced incrementally to reflect advancements in technologies and would welcome a transitional period. Financial incentives such as grants or funds could be made available to support the sector to switch to alternative fuels and/or introduce mains power onto sites, such as wind farms. These types of support could be reduced over the next 5 years to ensure the transitional support is focussed over a short term and rewards transition to lower carbon options.

Introduction

The IFF consultancy report published in February 2019 identified the Waste & Recycling Sector as the second largest sector that will be impacted by the removal of entitlement to use red diesel from April 2022.

This loss of exemption for registered waste management & recycling companies by the UK Government as afforded to other sectors such as agricultural, fisheries etc. will have significant operational and economic impacts on the SME Resource Management Sector in Scotland. These impacts will greatly reduce the resilience, future investment and growth opportunities of the sector, and will have accumulative and far reaching consequences.

The SME Resource Management Sector provides service delivery across the length and breadth of Scotland in urban, semi-rural and rural locations; and provides flexible and reliable services for multiple sectors including the agricultural, transport, building and construction, commercial, manufacturing, and public sectors. Recently during the COVID-19 Crisis, the Sector was rightly acknowledged as an essential service with employees deemed to be key workers.

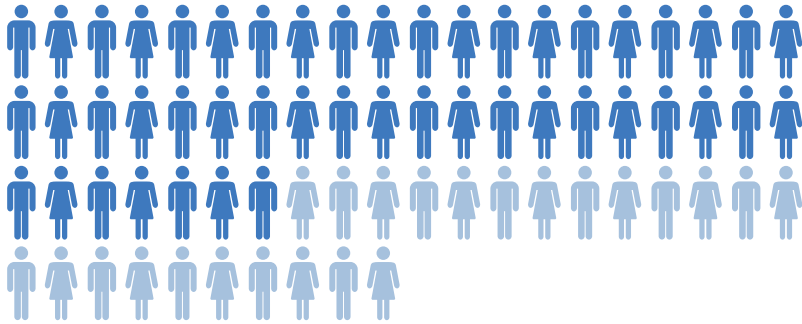
The RMAS carried out a comprehensive survey of members to more fully understand what the financial and operational impacts of this loss of exemption would be on the sector. The survey was also used to explore what greener alternatives are currently available for use by the sector, what barriers exist to switching to alternative sources of fuel, and what would enable and support the sector to transition.

This briefing paper, provides a summary of this research.



Methodology

The RMAS currently has 70 members, of which 47 were selected to take part in the survey. The selection criteria was based on whether the members were either a waste and recycling company or a supplier of machinery.



In April 2021, members were interviewed by telephone to collate information on (i) the financial and operational impacts of the loss of exemption including the impacts on their businesses and customers; and (ii) alternative fuel sources to diesel being considered and the barriers and opportunities for this.



Results

In total 28 RMAS members participated as detailed in Table 1; 20 waste & recycling companies and 8 affiliates including equipment suppliers, compliance scheme and independent consultants.



Table 1 Participating Members

Waste & Recycling Companies	Suppliers/Other
Barr Environmental	Balgownie
Billy Bowie Tankers	Blue Group
Binn Group	Contenur
Brewster Brothers	Europlastics Machinery
CCL North	GJF Fabrications
David Ritchie & Sons	MKD32
FRM Recycling	REPIC
Glasgow Construction & Demolition	SCG Supplies
Hamilton Waste & Recycling	
J & M Murdoch & Son	
Joe Junk	
Keenan Recycling	
Levenseat	
Newtown Waste Solutions	
Northern Recycling Solutions	
One Stop Waste Solutions	
Peter Allison Agriservices	
R M Easdale & Co	
WH Malcolm	
WRC Recycling	

Results

The majority of members (71%) indicated the loss of exemption would have significant financial and operational impacts on their businesses as displayed in Figure 1 and discussed in detail in the following sections.

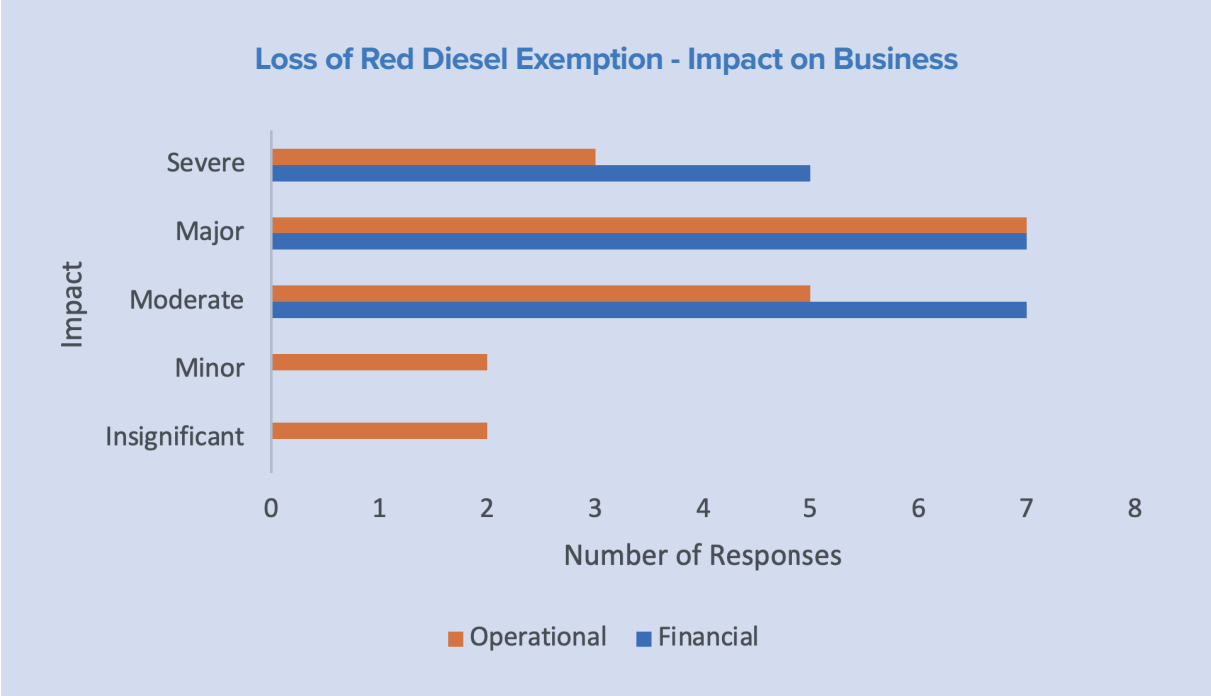
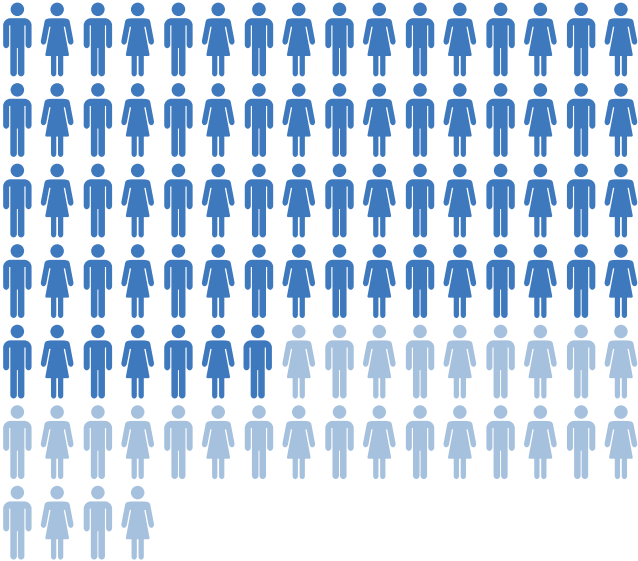


Figure 1 Expected Financial and Operational Impacts

Results

Financial and Operational Impacts

RMAS members indicated they are dependent on the use of a large range of plant and equipment which currently run on red diesel for a wide variety of day-to-day operational waste and recycling activities. The primary uses include mobile plant (shovels, grabs, telehandlers, dump trucks, excavators, dozers, etc.), and static & process plant (shredders, screens, generators, etc.), as detailed in Table 2 overleaf.



Table 2 Plan and Equipment

Type of Plant/Equipment	Variants Mentioned
Aerial Work Platform	
Artic	Leyland daf xf hgv Artic Unit (site use for moving plant and artic trailers)
Compactors	
Crusher	20t Crusher, Mobile Crusher, Terex Finlay j1175 Tracked Jaw Crusher, Terex Maxtrack 1000 Tracked Cone Crusher
Disab Units	400L
Donkey Engines	
Dozer	CAT D5 Dozer, 25t Dozer
Dump Trucks	CAT Rear Dump Truck, Volvo a23c, 25t Dump Truck
Excavators	Doosan dx225 360, JS220, JS160, JS145, JCB 86c, JCB 8065, JCB Hydradig
Generators	1000kwh, 225kwh, 250kwh, 35kva, 30kva, 500kva
Grabs	
Loading Shovels	Backhoe Loader, CASE Skid Steer, CAT, Fiat w190, JCB 437, Wheeled Loader,
Picking Stations	Mobile, Static
Screeners	Extec E7 Tracked 3 Way Screening Plant, Mccloskey Screener , Powerscreen 1400 Chieftain Tracked 3 Way Screening Plant, Powerscreen 800 Warrior Tracked 3 Way Screening Plant, Terex Mobile Screen, Warrior Mobile Screen,
Sewage plant	
Shredders	Doppstadt 2060 Mobile Shredder, Doppstadt 3060 Tracked Slow Speed Shredder, HAAS 2000XL Mobile Shredder, Hammell 750 Mobile Slow Speed Shredder,
Tankers	200L
Telehandler/Loadall/Forklift	Counterbalance Forklift, JCB 531, JCB 535, Manitou mla630 Pivot Telehandler,
Tractors	Case Tractor
Trommels	Powerscreen 511 tracked Trommell Screen
Waste Handler	Doosan 6.2 360 Tracked Waste Handler, JCB 175w 360 Waste / Scrap Handler, Kubota kx80 360 Tracked Waste Handler, Liebherr LH22, New Holland ec 60.2 360 Tracked Waste Handler

Results

Financial Impacts

Across the UK the Waste and Recycling Sector uses ~100 million gallons of diesel annually, and it has been estimated the loss of exemption will cost the sector an additional £50 million per annum.

For individual RMAS members it has been estimated that the average annual red diesel consumption is ~445,000L, the loss of exemption will result in a doubling of costs, with an associated average increase expected from £203,000 to £470,000 per annum.

This will have significant and long reaching financial impacts on RMAS members, their customers, suppliers and contractors.

As well as the direct financial impacts, members also highlighted a wide range of other economic, operational and environmental consequences which will arise due to the loss of exemption.

These impacts will also need to be considered alongside other impending legislation including the deposit return scheme, the BMW landfill ban, and EPR.



Results

Economic, Operational and Environmental Impacts

Economic

- Reduction in already slim profit margins.
- Increased prices for customers.
- Limited ability to proceed with CAPEX projects due to availability of funds to invest.
- Reduction in investment in new plant.
- Job losses.
- Loss of customers to cheaper or unscrupulous operators.

Operational

- A streamlining of recycling services and/or a reduction in services.
- Increased manual sorting, restricting the speed and efficiency of which materials can be sorted.
- Potential impact on compliance if delays are experienced with plant and equipment ordering due to reluctance to incur costs.
- Increased risk of theft.
- Requirement for fuel efficiency reviews of all equipment and plant.
- Staff training to optimise fuel usage.

Environmental

- Increased flytipping and the associated environmental impacts.
- Failure to achieve national recycling targets.

Results

The waste industry is already a highly competitive marketplace with high operating costs and thin profit margins. With the loss of exemption, the cost of recycling will have to increase to maintain these margins, however the options for passing on higher costs to customers is limited and would make the task of processing waste at a competitive price difficult. Both private and public sector customers will primarily look for value for money when looking for waste & recycling services, this is becoming even more prevalent as a result of the challenging markets and loss of business customers are facing as a direct result of the COVID-19 pandemic.

The majority of RMAS members are therefore likely to increase their prices and pass on some, or all, of the cost to their customers. This will have significant impacts across the supply chain, with customers likely to increase their prices to cover these additional costs. The majority of members are yet to fully determine what this price increase is likely to be, with some members limited to a <1% annual increase in public sector contracts, and others concerned that passing on the full cost will cause customers to look elsewhere to cheaper and potentially unscrupulous operators. Though the public sector may be protected from large price increases in the short term, once contracts are up for renewal, prices are expected to increase significantly. These additional costs will either need to be absorbed, with associated impacts on other areas of the public sector budget, or additional funding being sought from government.

For RMAS members the absorption of some or all of the additional costs would not be sustainable in the longer term, with many companies already having to make significant changes, restructuring and streamlining as a direct result of the pandemic. The additional costs, during a time when the economy and businesses across the UK are struggling, will greatly restrict the ability of the waste and recycling sector to grow and innovate. Further streamlining and reduction of services would be required to ensure waste management companies maintain financial viability with redundancies, halting planned site developments, and restricting the types and quantities of materials recycled all being actively considered. Scotland already has relatively high transport costs, due to the rural geography, and combined with the loss of exemption this will further impact the sector's ability to recycle. All of these will have a direct impact on the achievement of national recycling targets with the risk of fewer materials being recycled at a higher price.

Results

RMAS members are concerned about the impacts of the loss of exemption on fuel theft, with incidences expected to increase with greater quantities of white diesel being stored on-site. Red diesel is currently not targeted by criminals due to the use of red dye which immediately identifies it as illegal for road-use. Members have identified they will need to implement additional security measures including the use of secure fuel caps, anti-syphon technology, and increase site security, all of which alongside additional insurance costs, will result in further financial impacts on companies. However, upgrading security may only have limited success as a common method of stealing fuel is by drilling and draining tanks, rather than syphoning.

Members are also concerned increases in customer costs will lead to a rise in undercutting by illegal operators. This will have direct consequences of increased incidences of flytipping, and the associated detrimental impacts on the environment, and clean-up costs. Additional concerns are centred around a lack of level playing field, i.e. there is the potential for some agricultural operators who retain the exemption to have an economic advantage if they continue to also operate waste & construction activities using red diesel.

RMAS members who are plant and equipment suppliers also indicated a potential income reduction associated with customers reducing their capital expenditure and holding onto existing equipment for longer, increasing the demand for parts and maintenance.

Supporting the Sector to Transition to Alternative, Greener Fuel Sources

Many RMAS members have considered shifting to alternative fuels, such as electric, bio-gas, hybrid and bio-diesel. However, for the majority of all plant and equipment (mobile, static & process) which currently run on red diesel, options to switch to alternative fuels are extremely limited.

This is primarily due to the lack of viable alternatives which meet the power, torque and operating time requirements associated with managing heavy loads of waste and recycling, with the required advances in technology estimated to be 5-10 years away.

Electric and Hybrid Technology

With mobile and large static plant often requiring to operate on a continuous basis throughout the day, current battery life and charging times are significant barriers for transition and the loss of productivity makes electric or hybrid options commercially unviable for larger mobile plant.

Currently only smaller static or limited mobility plant are able to run on electric power, such as 360o grabs, forklifts, etc. These smaller units are less energy intensive and need charged less regularly. However, diesel powered generators are still used for charging purposes.

Supporting the transition from diesel to alternative fuels will incur significant additional costs for operators. This will include in the short term, costs associated with installing transformers and charging infrastructure on-site; connecting static equipment to the national grid via 3-phase power terminals; and in the longer term significant capital expenditure with replacing equipment and machinery when viable electric and hybrid options become available.

Bio-Diesel

Some members have considered switching to bio-diesels including the use of HVO (Hydrotreated Vegetable Oil) as alternative fuel sources. However, issues associated with engine compatibility, increased risk of blocking filters, voiding of existing warranties, lower MPG, increased costs associated with delivery to remote and rural areas, and the [duty rebate on red HVO bio-diesel also being removed in April 2022](#) were all highlighted as barriers.

Other Fuel Sources

Other fuel sources being considered or used include bio-gas; however availability and application for this fuel source is limited.

Finding Solutions

Some suppliers are exploring power-bank technology where multiple banks can be charged and swapped in and out of equipment to allow for continuous operations, however this technology is in the early stages of development and is several years away from market. Hybrid equipment which can trickle charge the engine for mobile plant is also being developed by some suppliers.

RMA's are calling for the switch to alternative greener fuels to be introduced incrementally to reflect advancements in technologies and would welcome a transitional period. Financial incentives such as grants or funds could be made available to support the sector to switch to alternative fuels and/or introduce mains power onto sites, such as wind farms. These types of support could be reduced over the next 5 years to ensure the transitional support is focussed over a short term and rewards transition to lower carbon options.





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