TROJAN

ELECTRONICS°

Who is responsible for introducing new circular initiatives?

Foreword

"We have a collective obligation to secure the future of our planet. While there are many discussions about sustainability in all sectors, we have to be honest with ourselves and ask if the electronics industry is doing enough. As the government pushes back its sustainability targets, our green efforts cannot afford to be delayed.

"But who is responsible for this change? I believe only a joint effort by electronics firms, policymakers, and consumers can bring about genuine and lasting change. By joining forces, leaders in the consumer electrical sector can ignite discussion, encourage true change and drive circular initiatives that are adopted across the world.

"This research, subsequent commentary, action plan and introduction of new circular concepts for the industry to adopt are a small step in bringing about the necessary change to ensure we are playing our part in the future of our industry and planet."

From James Rigg, CEO of Trojan Electronics and chair of CLEAR

Following the establishment of CLEAR, a trade body for electrical leaders to discuss and share best practices, we have commissioned research on the topic of "who is responsible for introducing new circular initiatives". Rather than point fingers, the group has joined to discuss each stakeholder's role in developing sustainable practices.

Based on consumer research data, insights from industry leaders and members' own experiences, the group will discuss the current state of sustainability in consumer electricals, and pool ideas on new circular concepts the industry can adopt, as well as discuss each stakeholder's role in the evolution of the industry.

Methodology and key findings

A consumer survey of 202 people asked about their opinions and attitudes towards the circularity and sustainability of electronic goods, was undertaken in April 2024.

85% of Britons think the government doesn't do enough to encourage sustainability in electronics.

24% of consumers think the government should encourage the reuse of electronic items.

89% of people think electrical manufacturers should be forced to allow third-party businesses to be able to refurbish and repair their electronic items.

56% of people say the high cost of repairing broken electrical items deters them from getting them fixed.

82% of consumers think they have a role to play in electronic circularity.

Methodology and key findings

A consumer survey of 202 people asked about their opinions and attitudes towards the circularity and sustainability of electronic goods, was undertaken in April 2024.

48% of consumers opt for better-built more durable products in an effort to increase the product lifespan.

91% of people would welcome a traffic light labelling system on electrical products to highlight the environmental friendliness and sustainability of electronics manufacturers.

74% of consumers are willing to recycle unused electrical products.

90% of consumers would recycle their electronic waste as part of their weekly curb-side bin collection to support sustainability efforts.

62% of people would change their electrical item purchasing behaviours based on the environmental impact of electronics manufacturers.

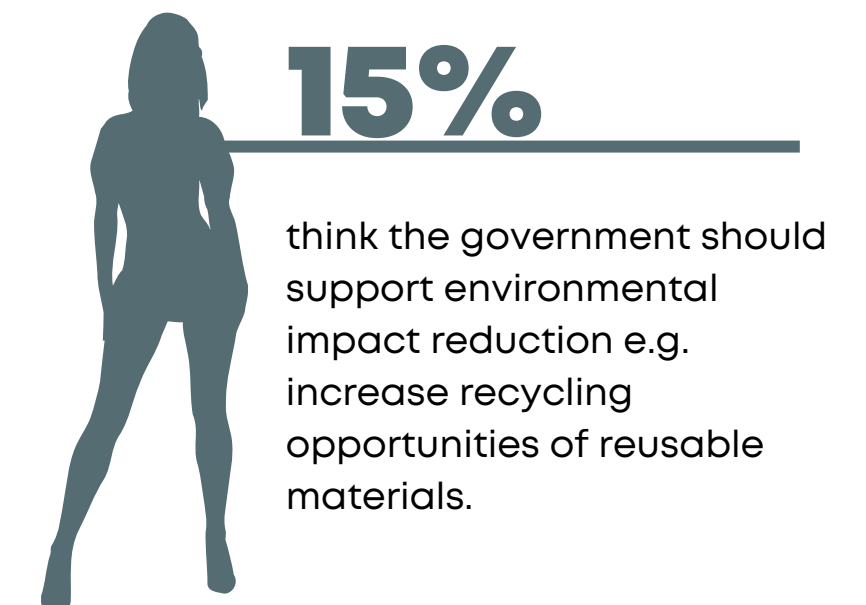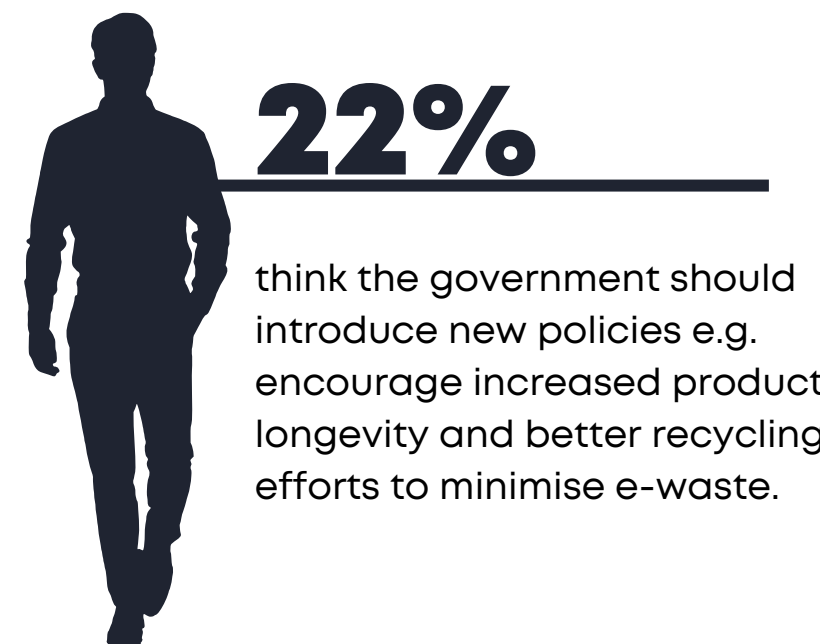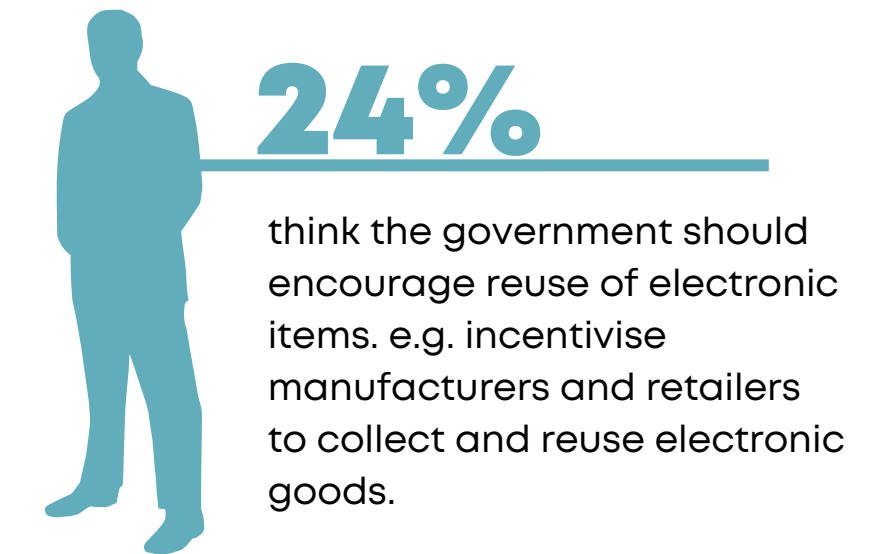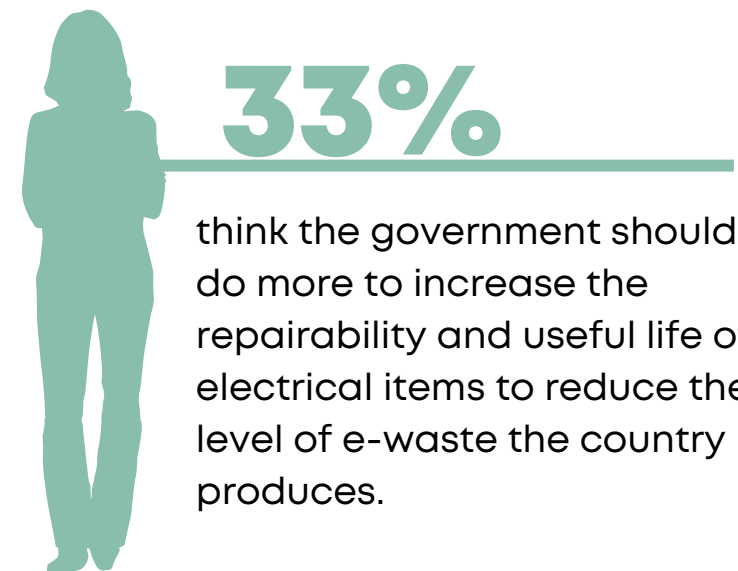**The UK government plays a pivotal role in advancing the circularity of electrical goods. Not only for the greater good but its success is also an essential component of its broader 2035 sustainability objectives. Having already deferred its Net Zero targets by five years it cannot afford to make further delays.**

Currently, 85% of Britons think the government doesn't do enough to encourage sustainability in electronics. All the while the UK remains the second-highest producer of e-waste in the world per capita. Consumers would like to see the government make recycling more accessible and introduce a policy on reducing reliance on finite resources. This includes the introduction of reduction and reuse targets.

Through new policies, the government can foster circular behaviour among consumers, and encourage the adoption of practices that prioritise the reuse and recycling of electrical goods. Key strategies include making it easier for individuals and businesses to engage in circular activities, such as the reuse and recycling of old electrical products.

33% think the government should do more to increase the repairability and useful life of electrical items to reduce the level of e-waste the country produces.

24% think the government should encourage reuse of electronic items. e.g. incentivise manufacturers and retailers to collect and reuse electronic goods.

22% think the government should introduce new policies e.g. encourage increased product longevity and better recycling efforts to minimise e-waste.

15% think the government should support environmental impact reduction e.g. increase recycling opportunities of reusable materials.

The government can also go one step further. Through new policy, it can make the repair and refurbishing of electrical goods more affordable and therefore more commercially viable.

91% of Britons would support the government in removing VAT on electrical spares and on labour to make the repairs to reduce the cost of repairing electronic items to extend their life.

James Rigg said: *"Policymakers also have the ability to remove VAT on the repaired product when it is resold as typically there is no further value added. Instead, the electrical item is taxed twice. The removal of VAT stops this and makes the refurbished item more affordable, something that would be greatly appreciated in the current cost-of-living crisis.*

"Reducing VAT on electrical spares and repairs isn't a revolutionary move for a government. Austria and France have already introduced schemes to subsidise the cost of electrical repairs in recent years. The UK government would simply be following suit as it lags behind its continental counterparts."

Government-led green initiatives would also have a secondary benefit, job creation. Research from <u>Green Alliance</u> suggests the zeroing of VAT could contribute up to 34,000 jobs in the repair sector and 312,000 in remanufacturing, boosting the circular repair economy.

James Rigg said: *"If we can extend the useful life of a small electronic item e.g. a mobile phone by one year, that's a 33% increase in its longevity. Currently, smartphones have on average just a three-year life, so extending it by a year means a third less e-waste, including finite materials and toxic substances are used. Small changes can have a significant impact on circularity impacts and a huge knock-on effect on sustainability efforts."*

Electrical product manufacturers and retailers play arguably the biggest role in fostering a circular economy. To create a sustainable model that emphasises the repair, refurbishment, and recycling of electronic items first requires them to be designed and built with longevity and repairability in mind. Extending a product's useful life also reduces the level of e-waste created.

Our research has uncovered a roadblock in repairing electrical devices. More than half (56%) of people say the high cost of repairing broken electrical items deters them from getting them fixed. This high cost can be attributed to a number of things, including the restriction and availability of spare parts and approved repair providers.

For example, smartphone manufacturers can lock and restrict the availability of spare parts in order to keep the consistency of the end product. Repairable white goods may also need to be diagnosed and fixed by registered companies. However, this results in repairs being cost-prohibitive or inaccessible if registered repair firms come at a premium or are not close by.
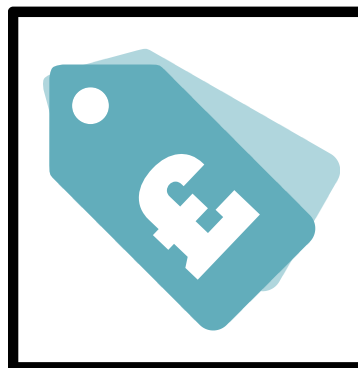
As a result, 45% of consumers say that it's cheaper to buy a new item rather than have their existing one repaired. More than a quarter (27%) say there is no option to repair many of their broken electrical items.
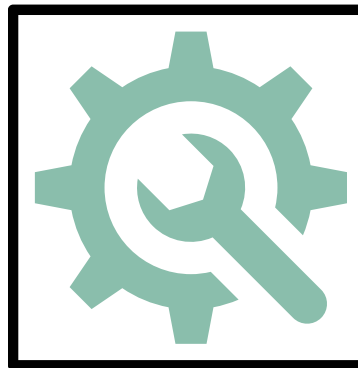
Reassuringly, one in six (14%) said they would always seek to repair an item as they are environmentally conscious. However, we cannot count on a relatively low proportion of people doing the right thing if true circularity is to be achieved.

As a result, the vast majority (89%) of people think electrical manufacturers should be forced to allow third-party businesses to be able to refurbish and repair their electronic items.

Legislation, such as the 'Right to Repair' law, underscores manufacturers' responsibilities in this regard, mandating that products be designed with repairability in mind. This legislation ensures that spare parts and repair information are readily available to both professional service providers and consumers, aiming to lower repair costs and facilitate the reuse of electrical goods. However, the price of repairs is still too high as a result of VAT, both on the parts and labour. This, along with a shortage of skilled labour to make the repairs on appliances and hi-tech gadgets means progress is still needed. Enabling apprenticeships in this area would increase the amount of skilled labour while also lowering the cost of the repairs.

Since the implementation of the 'Right to Repair', The European Commission has introduced new rules to ensure that smartphones and tablets are also designed with repairability in mind. However, these would not apply to the UK as domestic discussion largely centres around the correct disposal of electrical goods rather than an entirely circular approach.
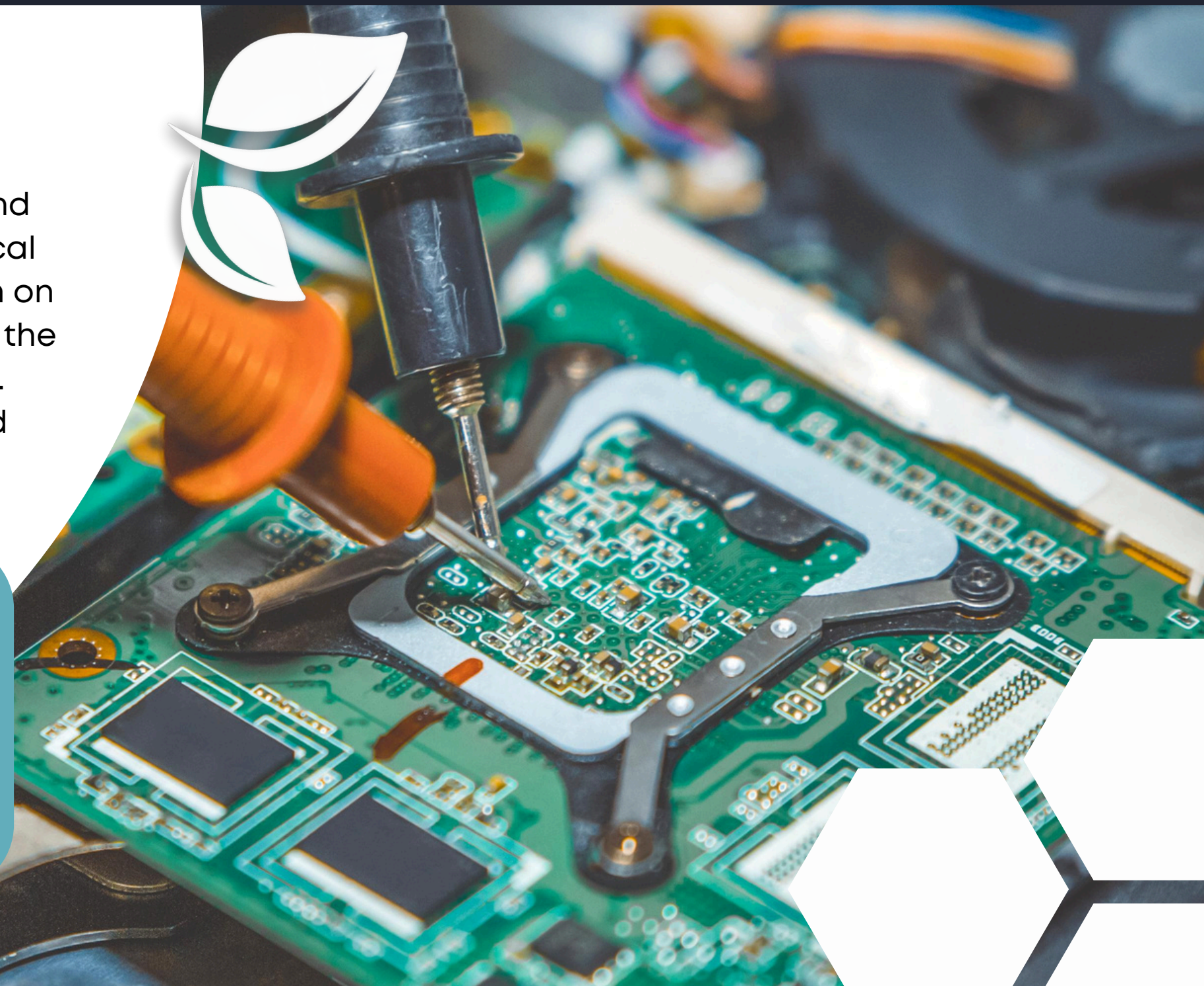
Obsolescence

Moreover, manufacturers have an ethical duty to avoid planned obsolescence, the practice of designing products with a limited lifespan to encourage frequent replacements. Some of the world's largest tech companies have been criticised for this in recent years including Apple the iOS updates to the iPhone, similar software developments in SONOS speakers, and Google and its unsupported Chromebook updates.

This practice not only unnecessarily exacerbates waste and environmental harm but also unfairly burdens consumers financially. Instead, the emphasis should be on creating durable, high-quality products that serve consumers' long-term interests and support the principles of the circular economy.

In addition, to help reduce the volume of improperly managed e-waste, manufacturers should consider introducing recycling or take-back schemes, which would enable them to recover and reuse materials to reduce costs and the requirement for extraction and purpose of new materials.

Currently, this is possible as manufacturers and retailers charge an average cost of £25 to do this, however with the advent of new Government policy manufacturers will have to make this collection for free. This change makes retailers and manufacturers work harder to recover the value within the disused appliances.

Chapter 3: Consumer's role in electrical circularity

The vast majority (82%) of consumers think they have a role to play in electronic circularity – just 15% think they do not.

Seven in 10 (70%) of consumers would also donate unused electrical products to increase circularity.

Circularity cannot be achieved without every stakeholder playing their part. While individuals may question their impact, together the consumer's role is pivotal in overcoming the waste electronic conundrum.

This is demonstrated further with almost three-quarters (74%) of consumers saying they are willing to recycle unused electrical products.

90% of consumers would recycle their electronic waste as part of their weekly curb-side bin collection to support sustainability efforts.

James Rigg said: *"With this level of engagement and interest in playing a part in extending the circularity of electrical items manufacturers and governments must work quickly to make sure repair and recycle options are as accessible and as cost-effective as possible."*
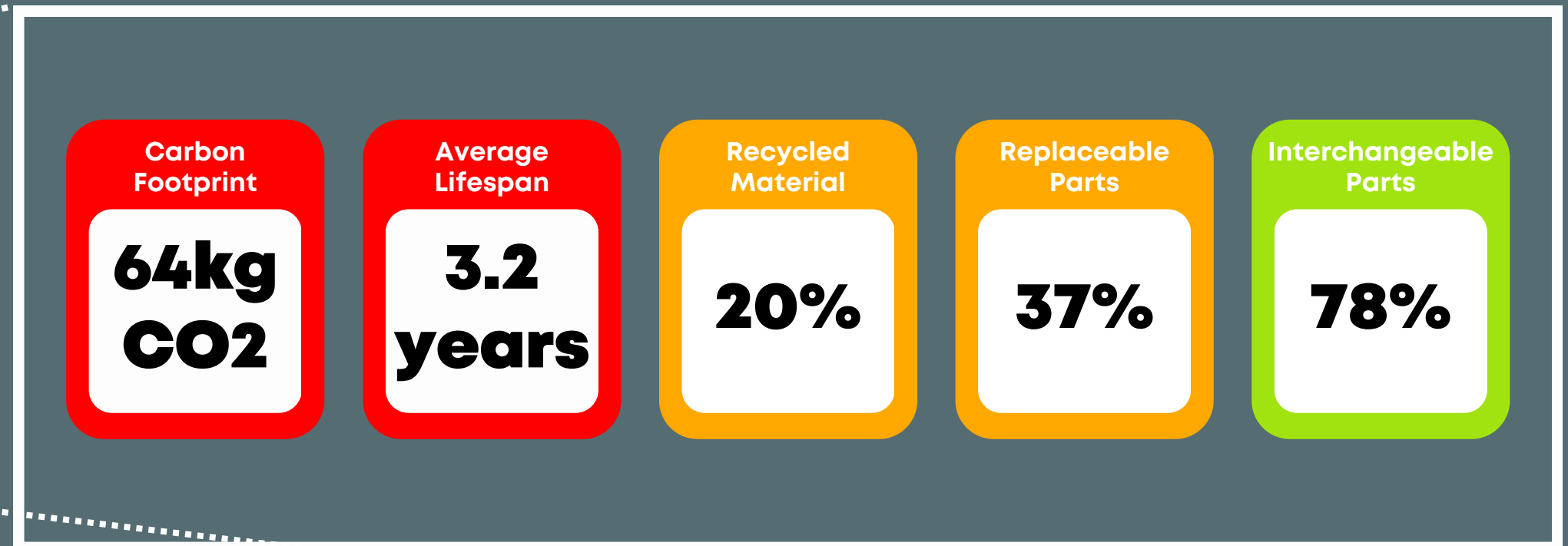
"Research shows large amounts of e-waste are mixed in with general household waste which ends up in landfill. This can easily be prevented with the introduction of a curbside collection. Rather incredibly, a ton of e-waste contains more gold than a ton of gold ore, this highlights that reclaiming materials from existing products is more productive than extracting it from the Earth."

As found in previous research by Trojan Electronics, consumers do think about the sustainability and environmental impact of their electronics. More than half (52%) of consumers get their electronic items repaired rather than buy new ones. What's more, 44% of consumers would buy refurbished electrical products, demonstrating that trust is growing in this category.

At the purchase stage, a similar amount, 48% of consumers opt for better-built more durable products in an effort to increase the product lifespan. Therefore manufacturers with a reputation for longevity and being robust are best positioned to benefit.

Introducing a new circular concept for consumers

Carbon Footprint	Average Lifespan	Recycled Material	Replaceable Parts	Interchangeable Parts
64kg CO2	3.2 years	20%	37%	78%

Following the research and discussions, CLEAR is proposing a new concept to support circular buying behaviours. The concept will also work to encourage manufacturers to improve their sustainability credentials.

Introducing a new circular concept for consumers

It is paramount that metals and rare earth elements are reused and kept within a circular system rather than using finite reserves. By considering the recyclability, durability, and longevity of electronics to consumers they can also play an important part in ensuring they remain in circulation at the highest value for the longest possible time, increasing circularity.

For example, a refurbished smartphone uses 91.3% fewer raw materials, 86.4% less water, generates 89% less e-waste, and puts 91.6% fewer carbon emissions into the atmosphere compared to a brand-new device. Even the creation of new items can improve their scores by relying less on virgin materials.

While we can suggest this concept, and manufacturers could take the initiative and introduce this type of signposting themselves, a government-imposed system would ensure that the implemented system was consistent across all electrical devices and easily understood by all consumers.

This would also have a knock-on impact on manufacturers of domestic appliances and handheld electronics who would be encouraged to design and make their products with repairability in mind.

Consumer reception

We have also piloted the concept to the survey panel with an overwhelmingly positive response.

91% of people would welcome a traffic light labelling system on electrical products to highlight the environmental friendliness and sustainability of electronics manufacturers.

18% said it would help them decide between products with similar features.

17% said it would make them think twice about their purchase.

17% also said it would give them more insight into the environmental impact of their purchase.

As a result of this concept, 62% of people would change their electrical item purchasing behaviours based on the environmental impact of electronics manufacturers.

From James Rigg, CEO of Trojan Electronics and chair of CLEAR

"Electronic circularity is a complex issue however improvements can be made with relatively small changes. With a coordinated effort, large-scale improvements can be made.

Research within this report and work done by other key stakeholders indicates that there are enough engaged people and organisations to achieve momentum. We now need policymakers within government to take action to bring about change. Change that is uniform, coordinated, wide-reaching and implemented from the top down.

Together with our suggestions for a simple and feasible solution to signposting, we hope to unite the stakeholder groups into implementing change. All parties must work together to reach the best outcomes.

We welcome further discussions and actions off the back of this research and plan to hold forums with retailers, manufacturers and policymakers who are able to work together with CLEAR to bring about change and circularity."

For business enquiries:

Contact **James Rigg**

Tel: **01484 448966**

Email: **jamesrigg@trojanemail.co.uk**

For press enquiries:

Email: **trojan@pragencyone.co.uk**

trojanelectronics.co.uk