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Poor Sustainability Practices

Enterprises are Overlooking
the E-waste Problem

April 2020
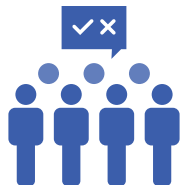
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About the Report

This report is based on an extensive survey of:

1,850 senior decision makers with job titles of Head of Compliance, Chief Financial Officer, Finance Director, IT Asset Manager, Chief Information Security Officer, IT Security Vice President, Data Protection Officer and Head of Operations

Enterprises across the world with over **5,000** employees, including those located in the US/Canada, UK, Germany, France, Japan, India, Singapore and Australia

The following sectors: government, technology, finance, legal, manufacturing, energy, healthcare, pharmaceutical, defense, transportation and advisory

The research was undertaken by independent research company Coleman Parkes Research in August 2019.

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Executive Summary

Demonstrating corporate social responsibility (CSR) is a requirement of most enterprise organizations around the globe. CSR focuses on creating ethical practices and awareness of the social, environmental and economic impact of business operations. It's a practice that has ramped up significantly in the past year, particularly in regard to environmental sustainability, or a company's duties to abstain from damaging natural environments.

Recent fires in the Amazon Forest and Australia, the United Nations' Climate Change Conference, Greta Thunberg's speech at Davos and Antarctica's new record high temperature are just some of the high-profile events that have shined a light on the need to work collectively to protect our planet.

Sustainability is becoming a new standard, not only in the way we shop but for shaping businesses, too. BlackRock, the world's largest investment firm, recently announced it will put sustainability at the center of its investment strategy going forward. The London Stock Exchange also recently announced its Green Economy Mark initiative to support companies with sustainable business models and investors who are increasingly focused on products, policies and services that are environmentally responsible.

But more needs to be done to ensure that corporate sustainability initiatives aren't just something that live on paper—but are deliberately and consistently employed in actionable steps and ongoing projects. One important way to influence corporate sustainability is to manage retired IT assets in a more environmentally friendly manner.
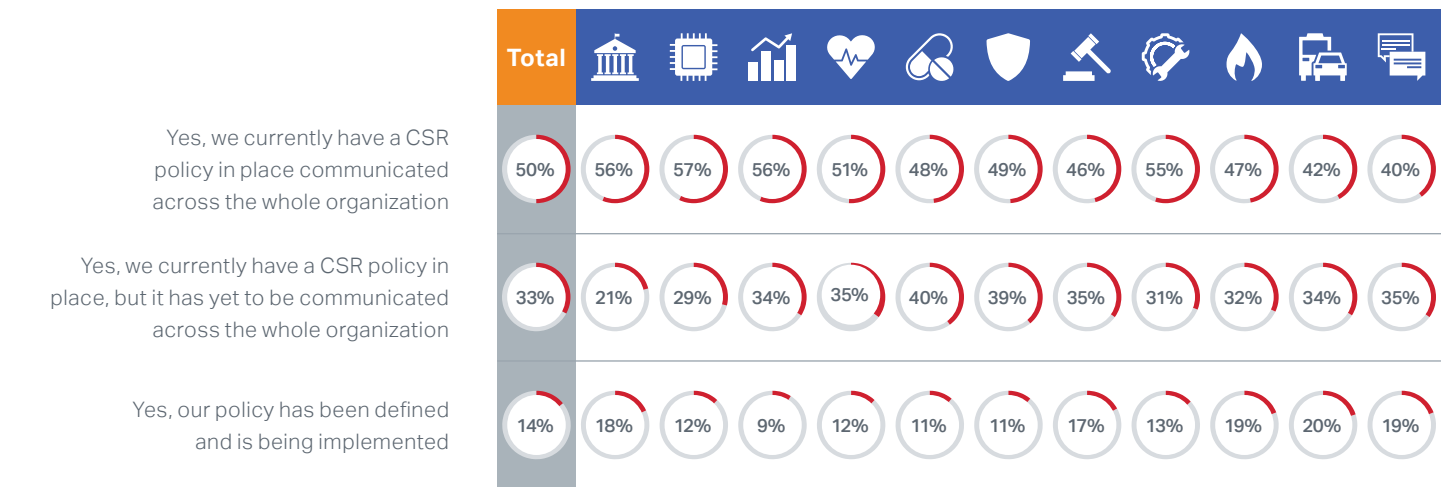
Our research carried out with Coleman Parkes into the policies of 1,850 of the world's largest enterprises found that only a small amount of end-of-life equipment is being sanitized and reused, despite 83 percent of organizations having a CSR policy in place.

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Executive Summary *cont.*

Do you have a Corporate Social Responsibility (CSR) policy in place in your organization?*

	Total	🏛	🖳	📊	💓	💊	🛡	⚖	⚙	🔥	🚗	🗨
Yes, we currently have a CSR policy in place communicated across the whole organization	50%	56%	57%	56%	51%	48%	49%	46%	55%	47%	42%	40%
Yes, we currently have a CSR policy in place, but it has yet to be communicated across the whole organization	33%	21%	29%	34%	35%	40%	39%	35%	31%	32%	34%	35%
Yes, our policy has been defined and is being implemented	14%	18%	12%	9%	12%	11%	11%	17%	13%	19%	20%	19%

Key

🏛 Government	⚖ Legal
🖳 Technology	⚙ Manufacturing
📊 Finance	🔥 Energy (Oil & Gas)
💓 Healthcare	🚗 Transport
💊 Pharmaceutical	🗨 Advisory
🛡 Defense	

* Not all answers included

In a bid to educate the industry on this complex and important area, Blancco is now publishing the third part of its three-part series of reports, identifying and exploring issues around data sanitization and corporate sustainability.

This report examines the CSR policies enterprises have in place today and how implementing data sanitization standards and initiatives as part of those CSR policies can have a positive impact on the environment.

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Survey Results & Discussion

The Issue with E-waste

Wastefulness is prevalent within the IT industry, and e-waste is a growing concern. According to the World Economic Forum (WEF) and the UN E-waste Coalition, approximately 50 million metric tons of e-waste are produced each year—the equivalent in weight to the total number of commercial aircraft ever built.

Most of this waste is incinerated, dumped in landfills or finds its way around the world where it is pulled apart or burned by the world's poorest countries, to the detriment of their citizens' health and the environment.

One of the primary causes of this growing global e-waste issue is the methods used to process hardware. More than a third (36 percent) of organizations use inappropriate data removal methods that may put their business at risk of negatively impacting both their security posture and the environment. These methods of hardware disposal include physically destroying end-of-life IT assets without an audit trail.

This typically involves shredding or crushing the equipment to ensure data is removed from the device. This often puts harmful waste into the environment if not done properly because IT equipment often contains toxic or hazardous materials, such as mercury and lead. If electronics are improperly disposed of, these hazardous materials can also harm anyone who is exposed to them. A responsible third-party vendor will separate hazardous elements appropriately and take the proper steps to ensure no toxins are released into the environment by recycling as much of the materials as possible.

> **Our latest research found that the world's largest enterprises are using physical destruction and collectively destroying hundreds of thousands of assets each year.**

Our latest research found that the world's largest enterprises are using physical destruction and collectively destroying hundreds of thousands of assets each year. If these organizations decided to erase their assets and resell them instead, they could earn up to 2,000 carbon credits per year, per business, according to numbers from our partner CO2Neutral™. In addition to earning these carbon credits to offset the waste they're producing, organizations also receive the peace of mind that they've pushed items into the circular economy (the economic system aimed at eliminating waste and the continual use of resources) instead of the landfill.

Reselling these devices isn't the only option. Organizations may also choose to reuse them internally or donate them to a worthy cause. To enable this process, organizations must sanitize assets securely through software-based data erasure instead of destroying them..

Physically destroying IT assets, when accompanied by a certificate of destruction and a full audit trail, is a valid data disposal option when hardware has reached end-of-life—especially if those assets are damaged or otherwise not in good enough condition to be erased and reused or resold. However, if physical destruction is performed on hardware that has not reached end-of-life or is still in good condition, it is simply bad practice. This is especially true if it is at risk of ending up in landfill or being informally recycled, like a 2019 France24 documentary of the Agbogbloshie landfill shows.
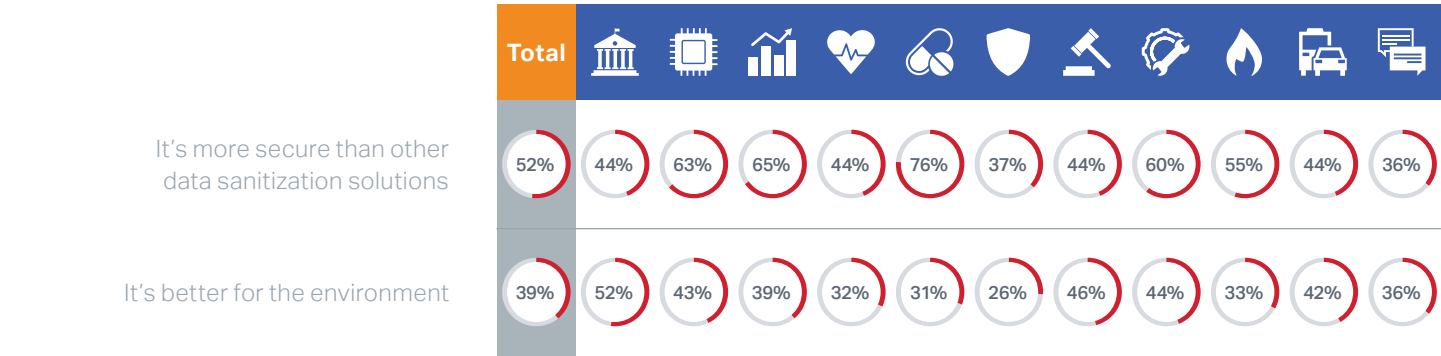
In our study, we found that over a third (39 percent) of all organizations surveyed physically destroy end-of-life IT equipment because they believe it is "better for the environment."

Figure 2.

What are your organization's top reasons for physically destroying unfunctional or end-of-life equipment?*

|	Total	🏛 Government	🖥 Technology	📊 Finance	💓 Healthcare	💊 Pharmaceutical	🛡 Defense	⚖ Legal	🔧 Manufacturing	🔥 Energy (Oil & Gas)	🚗 Transport	💬 Advisory
It's more secure than other data sanitization solutions	52%	44%	63%	65%	44%	76%	37%	44%	60%	55%	44%	36%
It's better for the environment	39%	52%	43%	39%	32%	31%	26%	46%	44%	33%	42%	36%

Key

🏛 Government	⚒ Legal
🖥 Technology	🔧 Manufacturing
📊 Finance	🔥 Energy (Oil & Gas)
💓 Healthcare	🚗 Transport
💊 Pharmaceutical	💬 Advisory
🛡 Defense	

* Not all answers included

The percentage is higher (52 percent) for government organizations and 46 percent for legal organizations. If physical destruction is performed on assets, components should be recycled whenever possible. Recycling e-waste enables the recovery of various valuable metals and other materials from electronics, saving natural resources, reducing pollution and conserving landfill space. But have they really verified the physical destruction process of their end-of-life equipment, from collection and transportation through to shredding, sorting and separation? And are they sending their end-of-life equipment to an environmentally friendly recycler?

The better option for sanitizing data on IT assets is data erasure. Data erasure is the software-based method of securely overwriting data from any data storage device using zeros and ones onto all sectors of the device. By overwriting the data on the storage device, the data is rendered unrecoverable and achieves data sanitization. This technology works for both magnetic storage and SSD storage. NIST SP 800-88 Media Sanitization Guidelines define how to use data erasure to achieve full data sanitization through purge-level security. For NIST, doing so is equal to the same security level as proper physical destruction with verification and an audit trail.

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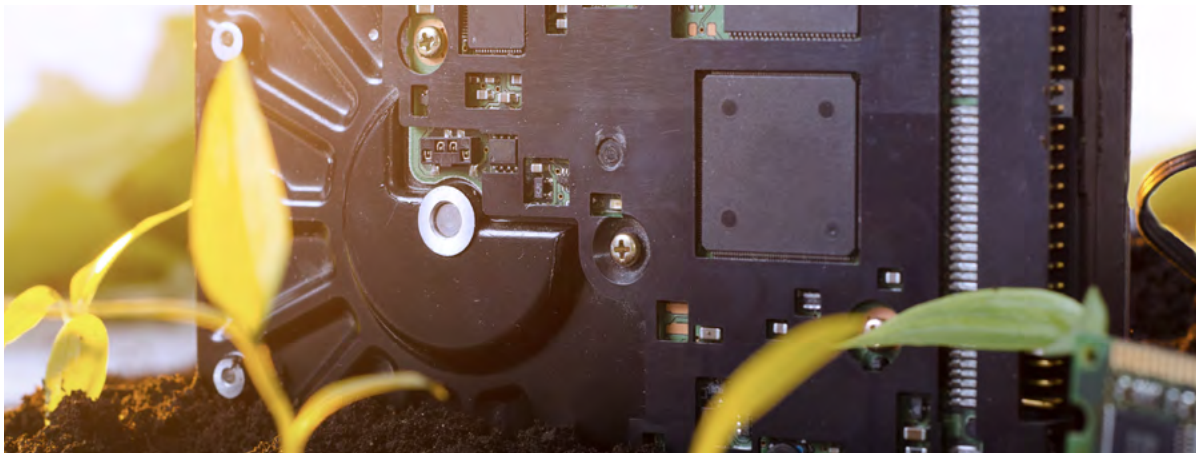
A Lack of Regulation & Policy Implementation

So why are so many organizations still choosing to physically destroy equipment instead of putting it back into the circular economy? The answer lies in three major areas: a lack of education, a lack of ownership and communication and a lack of robustness in data security and environmental regulations.

To achieve data erasure, the software must:

- ✔ Allow for selection of a specific standard, based on your industry and organization's unique needs.

- ✔ Verify the overwriting methodology has been successful and removed data across the entire device or target data (if specifically called).

- ✔ Produce a tamper-proof certificate containing information that the erasure has been successful and written to all sectors of the device, along with data about the device and standard used.

Once the asset is erased, verified and certified, it can then be reused, donated, resold or recycled.

Lack of education – As mentioned previously, over a third (39 percent) of organizations physically destroy unfunctional or end-of-life equipment because it is "better for the environment." This statement is simply not true, as erasing and reusing or redistributing equipment (when possible) is always preferred to ending the life of an asset permanently.

Lack of ownership and communication – Dealing with end-of-life equipment is part of the majority of organizations' CSR policies (91 percent) but this isn't being communicated or properly enacted across most organizations.

24 percent of government organizations don't have a policy in place that has been both implemented and communicated across the business. The same is true for the transport and advisory sectors, at 25 percent each. BAN, an industry watchdog group, has an ongoing project to place trackers in electronics and has identified many e-recyclers who claim not to export, but do. Ironically and unfortunately, local governments, school systems and non-profits are particularly vulnerable to being part of the damage to the planet and exposing children to toxic substances due to oftentimes awarding e-waste contracts to the lowest bidder, according to ERI.

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Figure 3.

Is end-of-life equipment management a specific part of your CSR policy?
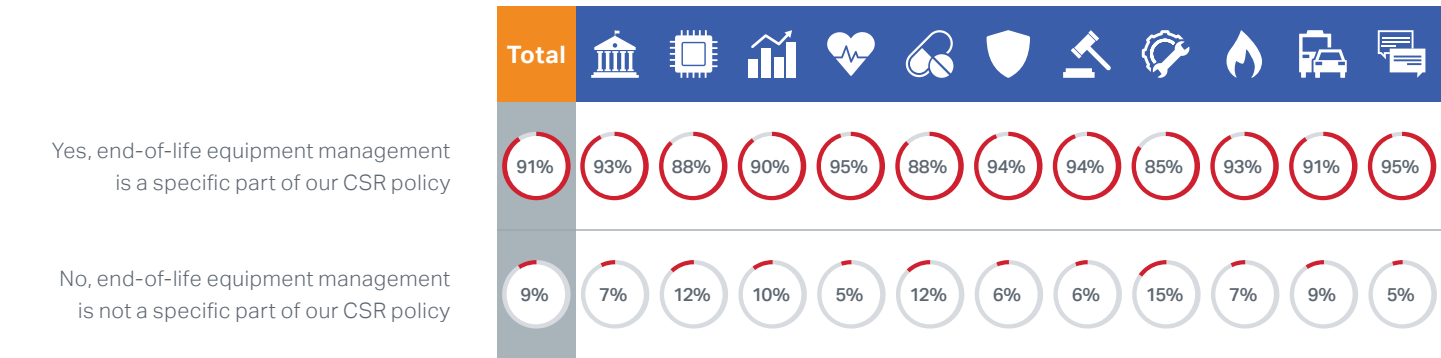
	Total	Government	Technology	Finance	Healthcare	Pharmaceutical	Defense	Legal	Manufacturing	Energy (Oil & Gas)	Transport	Advisory
Yes, end-of-life equipment management is a specific part of our CSR policy	91%	93%	88%	90%	95%	88%	94%	94%	85%	93%	91%	95%
No, end-of-life equipment management is not a specific part of our CSR policy	9%	7%	12%	10%	5%	12%	6%	6%	15%	7%	9%	5%

Key

🏛 Government	⚒ Legal
Technology	Manufacturing
Finance	Energy (Oil & Gas)
Healthcare	Transport
Pharmaceutical	Advisory
Defense	

Lack of robustness in regulations – In the US alone, 22 states don't have state-wide e-waste laws. And despite the existence of the EU's WEEE Directive and WEEE Regulations (2013), the UK missed its targets in 2018 and is one of the worst offenders for exporting waste to developing countries. Radical action and more robust regulations are needed. See more here.

Organizations can help mitigate these issues by properly educating everyone across the business about why disposing of IT assets when they are no longer required must be done in a secure and environmentally friendly way. Large organizations can also encourage regulatory bodies to create e-waste legislation that is more comprehensive across all their global places of business.

Today's Cyber Landfill: A Growing Concern

One way to include proper data sanitization as a company-wide initiative is to consider removing unnecessary data in active environments. The growing problem of global waste is not just a physical one; it's a digital one, too. Recent research from GreenIT reveals that the digital world in 2019 was comprised of 34 billion IT devices for 4.1 billion users—an average of eight IT devices per user. These devices generate 2.5 quintillion bytes of data per day. In corporate environments, according to research from Hewlett Packard Enterprise, data centers consume about 2 percent of the world's electricity today—a number that's expected to reach 8 percent in 2030. On top of that, only about 6 percent of all data ever created is in use today, which means 94 percent is sitting in a vast "cyber landfill," albeit not one with a massive carbon footprint. In short, organizations around the world are sitting on vast amounts of redundant, obsolete or trivial (ROT) data they don't need and that could be easily erased.

Often, this data should be erased after being saved for required retention purposes. Security regulations across the globe state that data should only be kept as long as it's needed and securely disposed of when it's not. This principle of data minimization is important, but as we can see by the numbers, many organizations are not abiding by this best practice.

In order to reduce their energy consumption, organizations need to actively look at the data they hold as part of their data lifecycle management initiatives and regularly and securely remove the data they no longer need. Doing so will also assist with compliance and cost concerns.

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The Circular Economy: A Solution for the Environmental Crisis?

Although many enterprises have corporate sustainability policies in place, clearly not enough is being done. According to our survey, only 24 percent of end-of-life equipment is currently being recycled. This is astounding considering that the material value alone of yearly e-waste amounts to $62.5 billion. According to the WEF and the UN E-waste Coalition, there is more gold in a metric ton of mobile phones than there is in a metric ton of gold ore.

The process of mining precious metals like gold also causes significant damage to the environment. By erasing and reusing old electronics until they're no longer functional, this impact can be substantially reduced.

To support the circular economy and reduce your organization's environmental impact, consider the following steps:

- ✔ **Stop unnecessary physical destruction** – Early retirement and destruction of IT assets that could be recycled, reused and resold is not the best choice for the environment. Instead, consider software-based data erasure to enable the devices to be a part of the circular economy.

- ✔ **Recycle responsibly** – When an IT asset is broken/faulty or is otherwise not in good enough condition to be resold, reused or donated, it should be sent to an environmentally friendly recycler instead of ending up in landfills without proper processing. The actual storage drive (HDD or SSD) within devices could possibly be processed in a different way. Erased as a loose drive, the drive can often be repurposed, even if the original system it came from is no longer functional.

"

24 percent of government organizations don't have a policy in place that has been both implemented and communicated across the business. The same is true for the transport and advisory sectors, at 25 percent each.

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Three Ways to Incorporate Data Sanitization in Your Corporate Sustainability Policy

Here are three steps you should consider as part of demonstrating corporate social responsibility when it comes time for IT assets to be sanitized.

2

Ensure that data erasure is a well-communicated and consistently employed part of your corporate sustainability policy:

1

Securely remove data from assets before they're reused or resold, and document a full audit trail to reduce your data footprint and related costs.

3

Communicate the policy across your entire organization on a regular basis, including how it helps your organization feed the circular economy and improve the environment.

❗ When IT equipment cannot be erased, make sure you are sending it to an environmentally friendly recycler/ITAD.

❗ If the IT equipment can still be sanitized and reused, make sure you are doing so in an environmentally friendly *(but also secure)* way with trusted data erasure software that both verifies and certifies the erasure.

Poor Sustainability Practices: Enterprises are Overlooking the E-waste Problem | Research Study | April 2020

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Conclusion

Businesses today are quick to say they have CSR policies in place, but are they putting these policies into action, and do they include a data sanitization component to allow IT assets to enter the circular economy instead of being destroyed (when possible)?

If your organization is currently physically destroying assets as its only method of data sanitization, consider adding data erasure to your corporate sustainability model to enable device reuse. In doing so, you could earn carbon credits and decrease costs, while making a sizeable donation to the circular economy. To truly become a sustainable workplace, all IT assets and related processes must be included in corporate sustainability initiatives.

Blancco has helped organizations securely erase sensitive data from end-of-life assets and live environments for more than 20 years, enabling hundreds of millions of assets to be ready for reuse, while also removing the risk of data breaches. Recently, Blancco was awarded the Green Economy Mark accreditation from the London Stock Exchange for our sustainable business model. In addition to providing a positive environmental impact, Blancco also enables organizations to save money on data storage and meet retention, security and compliance goals. Contact us today for more information.

Ready to get started with data erasure and improve your organization's enviromental impact? Use our **Data Erasure Solution Picker** to find the best solution to fit your needs.

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About Blancco

Blancco is the industry standard in data erasure and mobile device diagnostics software. Our data erasure software provides thousands of organizations the tools they need to enable sustainable data sanitization processes across the widest array of IT assets. By focusing on erasing and reusing assets instead of physically destroying them, organizations can improve their security posture and address corporate social responsibility requirements, while also ensuring compliance with local and global data privacy requirements.

Blancco data erasure solutions have been tested, certified, approved and recommended by 15+ governing bodies and leading organizations around the world. No other data erasure software can boast this level of compliance with the rigorous requirements set by government agencies, legal authorities and independent testing laboratories. All Blancco erasures are verified and certified, resulting in a tamper-proof audit trail.

With Blancco Mobile Solutions, organizations can achieve real-time valuation for mobile devices with a simple tool that enables consistent, accurate and measurable diagnostic testing, in-store or remotely via a customer-facing app, with workflows purpose-built for buy-back/trade-in, mobile insurance and returns reduction.

Additionally, mobile processors can achieve operational excellence while maximizing profits with Blancco Mobile Diagnostics & Erasure, a purpose-built solution that streamlines diagnostics, erasure and grading processes to prevent unnecessary touchpoints and increase efficiency.

For more information, visit our website at blancco.com.

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