

## Preventing, Reducing and Managing Electronic Waste

### Understanding the Impact of Electronic Waste

Electronic waste, or e-waste, refers to electronic equipment that has reached the end of its life, including items such as computers, monitors, televisions, laptops, tablets, fax machines, stereos, and copiers. E-waste is an area of growing concern because of the vast amounts of electronic products bought and sold each year. In 2017, the US alone produced 6.3 million tons of e-waste.<sup>1</sup>

It is important to properly handle e-waste since it contains toxic materials and valuable precious metals. This resource summary provides the hospitality industry with strategies to mitigate generation and safely dispose of e-waste.

### Prevention Opportunities

The e-waste life cycle starts with the manufacturing, distribution and sale of electronic products, which are used until they no longer work and are disposed.<sup>2</sup> Unfortunately, most e-waste is disposed of incorrectly—only about 22 percent of e-waste is recycled in the US.<sup>1</sup> Used electronics can be refurbished for sale or recycled to supplement the raw materials needed during production.

For hotels, pollution prevention practices for e-waste can be applied while purchasing, using and disposing of electronics.



### Purchasing Electronics

When purchasing electronics, there are some key criteria to consider to help prevent e-waste, such as the device being:

- **Refurbished** - These items are cheaper than new alternatives and can offer the same functionality.
- **Multifunctional** - Use multifunctional equipment to reduce the amount of electronics needed throughout your hotel.
- **ENERGY STAR® Certified** - ENERGY STAR certified electronics will use less energy than non-certified products.<sup>3</sup>
- **Made with Recycled Materials** - Products made from recycled materials help supplement the raw resources needed to manufacture electronics.
- **Easily Upgradeable** - Purchasing upgradeable equipment allows you to switch out only necessary components, saving money and prolonging the device's lifespan.
- **Made with Less Toxic Materials** - E-waste can contain lead, mercury, cadmium and arsenic. Looking for products made with less of these substances will prevent these toxic materials from leaching into the environment.<sup>4</sup>

### Sustainable Materials Management

Sustainable materials management (SMM) is an approach to using and reusing materials more efficiently over their entire life cycle. This method seeks to minimize environmental impact from inefficient materials and represents a change to how people think about natural resources.<sup>5</sup>

Hotels can champion SMM by practicing proper usage of hotel room electronics and informing guests as well. This can go a long way to preserving the life span of these devices. Some simple tips are:<sup>6</sup>

- Turn off devices when not in use
- Clean devices regularly
- Replace damaged cables

The SMM approach also considers having sufficient resources for both today's needs and the future's.

### Proper Management of E-Waste

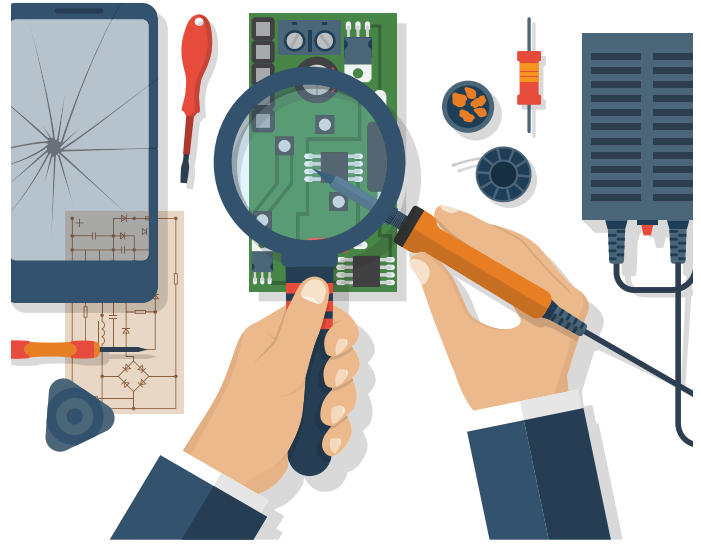
When it comes to managing e-waste disposal, you have many options. Strategies to properly manage your e-waste include:

**Donation** - There are non-profit organizations that will donate repaired computers to students to give every student access to electronic education material. Donated or repaired computers can provide low-cost access to the benefits of technology for those who may not normally have it. Office equipment donated to non-profit organizations such as Computers With

Causes can offer tax benefits for your business.<sup>7</sup> You can also look into your local schools to see if they accept electronic equipment for academic repair classes, such as Mesa Public Schools.<sup>8</sup>

**Recycle** - The U.S. Environmental Protection Agency (EPA) has created a list of certified electronic recyclers. These recyclers have been certified by R2 and/or the e-Stewards program.<sup>9</sup>

**Repair** - If you are disposing of your electronics because they no longer work, try to reach out to manufacturers or local repair shops to see if they can repair the item, which may extend their life and lower your hotel's expenditures.



## References

- <sup>1</sup> United Nations University. The Global E-waste Monitor 2017.
- <sup>2</sup> U.S. Environmental Protection Agency. Basic Information about Electronics Stewardship.
- <sup>3</sup> ENERGY STAR. Certified Products.
- <sup>4</sup> U.S. Environmental Protection Agency. Cleaning Up Electronic Waste (E-Waste).
- <sup>5</sup> U.S. Environmental Protection Agency. Sustainable Materials Management.
- <sup>6</sup> U.S. Environmental Protection Agency. FEC: Publications and Resources.
- <sup>7</sup> Computers with Cause. Tax Deductible Computer Donations.
- <sup>8</sup> Mesa Public Schools. Communication and Marketing.
- <sup>9</sup> U.S. Environmental Protection Agency. Certified Electronics Recyclers.