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# Topic 3: The Question of Regulation of Planned Obsolescence.

## Introduction to the Topic

The last issue that SDG 9 will be debating on is the question of regulation of planned obsolescence. Planned obsolescence is a strategy that certain companies use to encourage the sales of their newer products as replacements. Certain products are deliberately designed to break quickly or become obsolete within a set period. Manufacturers are able to greatly benefit from this strategy as sales show to have substantial growth each year by the encouragement of consumer consumption. However, planned obsolescence revolves around financial benefits while overlooking the environmental costs.

Companies usually use three common strategies for planned obsolescence, the first is the installation of unreliable internal parts. Through this technique the product is designed to fail within a predetermined period of time, so consumers are required to pay for a replacement. Another common strategy is to use software programming to ensure a product fails after a set period or number of actions. It is also common to undertake a software upgrade that is incompatible with more aged hardware. Lastly, clever marketing schemes can convince customers to upgrade their devices and discard their current well-working models that are now considered “not fashionable”. This strategy is often used during the debut of new models of technology, more specifically smartphones.

In general, smartphones are usually discarded after a couple  years of use. The battery fades, the screen cracks, the phone starts to lag, no longer updatable, etc, these are all common occurrences as all devices have a lifeline. When customers face these inconveniences, there are always better and newer models in the market that they might lean towards instead of fixing their old model due to low accessibility and high costs for spare internal parts. Technology often becomes obsolete by itself, and as for rapid technological innovation, by the time a current device breaks the market will have a newer device that will outperform the older model. Regardless, constantly

expending resources and energy to make new products has a detrimental impact on the world around us. Each step of the supply chain impacts the environment, from mining, extraction, and refinement of raw materials to the transportation, production, and delivery of manufactured products. E-waste output vastly outpaces the impacts of recovery systems, repair, and recycling, according to the UN, making it the fastest-growing home and commercial waste stream in the world. Planned obsolescence encourages a "buy new and buy often" culture, which adds to this waste.

However, it is important to recognize that by introducing frequent minor adjustments, firms are able to maintain profitability in competitive markets. If customers didn't need to change devices for 5-10 years or products were manufactured with maximum capabilities, the company would find it challenging to survive in the market and not enough customers would find such products affordable. The idea of planned obsolescence allows companies to manufacture products more price efficiently hence making their goods affordable. This allows the company to stay profitable, hence benefiting both manufacturers and consumers. People of all income levels are able to access more goods, which may not have been conceivable in the past, due to the development of replaceable products, inexpensive parts, and more efficient manufacturing processes. It takes a lot of effort to develop new upgrades and meet high consumer demand. As workers are required to consistently meet the demand for the newest products, this constant level of work benefits the economy through the creation of more job opportunities and giving manufacturing workers a chance to make a living while contributing to society.

## Definition of Key Terms

**Obsolescence:** The process of becoming outdated and no longer usable.

**Planned obsolescence :** A strategy to ensure that the current version of a certain product will become outdated or worthless within a predetermined time frame.

**Circular Economy:** A circular economy is a way of producing and consuming goods that prioritises sharing, renting, reusing, repairing, and recycling already manufactured goods for as long as possible.

**Government Intervention:** Government intervention is a regulatory strategy used by the state to influence the choices made by people, organisations, and groups about social and economic issues.

**Natural Resources:** Natural resources are substances obtained from the planet that are used to sustain life and provide for people's needs.

## Key Stakeholders

**European Commission:** The quantity of waste electrical and electronic equipment (referred to as WEEE or e-waste) has been rapidly increasing each year in the EU. Waste consisting of electronic equipment contains large unusable gadgets including computers, phones, fridges, etc. This kind of waste comprises an intricate variety of minerals, some of which are toxic. If not managed efficiently, they might result in serious environmental and health problems. In order to minimise these negative implications to the environment the EU has introduced the WEEE directive to tackle the issue of large e-waste accumulation. The main objective is to drive sustainable production and consumption through the reduction of WEEE production. Simultaneously working towards the efficient use of resources and the retrieval of secondary raw materials by reusing, recycling, and other ways of recovery. While also elongating the lifecycle of EEE. This directive would aid European nations to more effectively combat the export of illegal waste by making it more difficult for exporters to conceal illicit shipments of WEEE. It would also require appropriate treatment of WEEE by setting targets for its collection as well as the rate of recycling and recovery. The commission plans to hold multiple consultations over the months in order to assist in the further evaluation of the WEEE Directive.

**Tech Companies:** Several business use tactics including the use of a product ecosystem and planned obsolescence. Apple for example offers a range of products, starting from the iPhone, and iMac to Apple watch, each having the capability to share information with the other. Due to the easy interconnection between the different products, consumers are able to access information easily between devices. This may be beneficial inside the ecosystem but it also restricts consumers from switching technology brands, making it difficult for competitors to enter the market. The product ecosystem challenges consumer rights by restricting access to competing goods.

Apple's business depends on the interaction between consumers and producers, where, like all businesses, the focus is on stable sales. With the release of each year's operating system, Apple sets out to remove compatibility for several devices that are yet to be considered old. Making them a target for many

complaints, lawsuits, and investigations regarding planned obsolescence. The main goal of the introduction of several new operating systems is to present features that make customers desire to upgrade their devices. With the introduction of iOS 16 device compatibility, many consumers were dissatisfied to see that Apple had eliminated all devices prior to the iPhone 8. Users of incompatible devices are plagued by concerns not only about being restricted from the new iOS features but also about the security of their own devices. As previously Apple has misled customers regarding the duration of security updates. Customers are left in a difficult situation where they must choose between paying whatever price Apple sets for a newer device or losing the time and money invested in their current Apple product when it runs down. And customers that are at peace with missing out on updates remain at risk of security and privacy threats.

**Non-Governmental Organisations (NGO):** Many NGOs stand as stakeholders for example the Spanish NGO Amigos de la Tierra (branch of Friends of the Earth International) launched Alaargascencia, an initiative against planned obsolescence. By encouraging the purchase, sale, rental, and exchange of used items they are advocating to prolong the useful life of products as much as feasible. As products become less durable or difficult to repair due to business tactics, consumers have to face the consequences. This is where Alargscencia comes into play, providing establishments for repairing, exchanging, and purchasing or renting second-hand products. In order to cut down the use of natural resources, while consumer demand continues to grow, Alargscencia proposes reduction as the best mode of action, committed to the use of durable, repairable, shared, and communal goods.

**United Nations International Telecommunication Union (UN ITU):** An agreement by the UN ITU proposes to diminish the damages caused by electronic waste through recycling and retrieval of hazardous and toxic material, along with introducing ways to improve equipment management. ITU estimates that electronic trash will increase dramatically, especially in developing nations, while only 13% of electronic garbage is recycled, frequently without safety precautions in place. The agreement has been signed between ITU and the Secretariat of the Basel Convention (SBC) with the intention of strengthening the collaboration between ICT and environmental policymakers to address the issue of mass electronic waste accumulation. Collaboration between ITU and SBC will lead to an advancement of their objectives in support of sustainable development, which fundamentally involves responsible waste management.

**Third-party maintenance (TPM) services:** In order to achieve their business goals, more and more firms are now coming up with creative and novel ways to cut expenses while maximising the use of capital investment on IT equipment. However, several customers prefer going to the original equipment manufacturers (OEM) to repair their devices, which isn't always a financially efficient idea. TPM services are not required to make large investments in hardware development and research, unlike OEMs. This allows TPMs to keep relatively lower costs compared to OEMs. The main goal for OEMs is to encourage sales of new equipment rather than repairing already installed hardware, supporting the planned obsolescence model. TPM services are aiding sustainability by extending the life cycle of electronics beyond the life set by OEMs.

## Key Issues

**Accumulation of Electronic Waste:** As companies produce devices that are only usable for a predetermined time period, there is an excess release of electronic waste into the environment. As of now, around 65 million tonnes of e-waste is generated globally per year, with only 20% of it being recycled. Half of the e-waste produced consisted of large household appliances, heaters, and air conditioners. The other half consisted of Televisions, smartphones, computers, and tablets. According to a UN report from 2014, Europe stands at the highest rank for per capita electronic waste output, with over 15 kilograms per person annually. Asia produced 16 million metric tonnes of electronic waste annually, followed by the Americas with 11.7 million tonnes. These numbers have increased by almost 50% since 2014. The accumulation of this debris, which is still not properly recycled, harms the ecosystem and exacerbates climate change.

**Violation of Consumer Rights:** Consumer rights protect consumers from fraud, deception, and unfair business practices. The planned obsolescence model overrides many of the core values of consumer protection hence consumers are increasingly having a negative reaction to the practices of planned obsolescence. Legislations such as WEEE set by the EU have been introduced to reverse the effects of planned obsolescence, however, none focus on specific consumer rights protection. Businesses must be careful to follow the code of conduct or quality standards to avoid being associated with planned obsolescence if they want to maintain their customers and reputation.

**Not easily repairable devices:** When a part of the device starts to malfunction, manufacturers would recommend consumers purchase a newer model instead of repairing the older model. Manufacturers are increasingly making decisions that make it difficult for consumers to fix their own devices or have third parties run their business. Some of these decisions may be merely cost-cutting or shutting consumers out for the specific purpose of making it difficult for people to repair their items.

**Negative implications of Extracting Resources:** Due to the short life span of most consumer devices, the environment suffers a significant negative impact. The production process of smartphones accounts for 85-95% of their carbon footprint. Initially due to the energy directed towards mining gold and rare earth elements required to power these devices. A lot of the attention is directed towards the energy used, but not enough towards the materials being used. Extraction of the Earth's natural resources through practices like mining has a significant impact on the environment, adding to more than just carbon emissions. Natural landscapes are divested along with immense pollution in the process. Biodiversity gets impacted when materials are extracted from the natural world as natural habitats of animals are being exploited. Local communities can also be negatively impacted by mining, and some of the components mined for smartphones have been linked to conflict and violations of human rights.

**Limited Resources:** Mining of raw materials has negative social and environmental impacts even before entering the manufacturing process. The earth contains a finite amount of resources which come at a loss due to the leaching and build-up of landfills. This is a problem that surfaces due to the cycle of wasteful production. The use of certain toxic substances like lead, mercury, and calcium can cause several health risks and threats to the environments of surrounding communities.

## Timeline of Resolutions, Treaties, and Events

| Date | Description of event |
|---|---|
| 1890 | The Sherman Antitrust Act was the first federal law to forbid monopolistic commercial practices. It was founded on US Congress's constitutional authority to control interstate trade. A trust is a contractual mechanism that allows shareholders in multiple firms to transfer their interests to one trustee group. In return, the stockholders receive a certificate entitling them to a specific portion of the combined profits of the jointly managed businesses. |

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| 1914 | The Federal Trade Commission (FTC) was created by the congress in order to regulate monopolies, eliminate biassed competition, and restrict the use of unethical or dishonest business methods. The Justice Department was proved unsuccessful under the Sherman Antitrust Act of 1890 in limiting the development of monopolies and controlling trade restrictions. As a result of these failures, the FTC act was passed in 1914. The purpose of the act was to protect the general public from misleading advertising practices while also enforcing free and fair competition in interstate trade. |
| 1938 | The US congress passed a prohibiting law against “unfair and deceptive acts or practices. The FTC has been mandated to oversee the enforcement of consumer protection legislation ever since. The three primary goals stand to protect consumers by preventing fraud and unjust business practices, to protect anticompetitive mergers and other anticompetitive business actions in order to maintain business competitiveness and to improve FTC performance by pursuing excellence at all levels of an organisation, an individual, and management. |
| August 2001 | The right-to-repair bill was introduced by Senator Paul Wellstone in the US senate in August 2001, with the ultimate goal of ending the “unfair monopoly” of manufacturers withdrawing repair information which could result in third-party repairers turning away customers due to lack of information. This law meant customers had the option to freely reach out to independent repair shops. |
| 14 February 2014 | The WEEE directive was transported into national law by the respective EU member states. Although it is to be noted that the directive first entered force on 13 August 2012, and then was later transported into national law. |
| 15 August 2015 | On this date, France passed its Energy Transition for Green Growth legislation. The Act outlines a plan for altering France's energy system without impeding its economic expansion. The act calls on producers and consumers from all sectors to do their part in reducing greenhouse gas emissions. |

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|---|---|
| 4 July 2017 | The European Parliament approved a resolution calling for a longer lifetime for products. These measures are taken to ensure that consumers are able to enjoy high-quality and long-lasting products that can be repaired and upgraded. Consumers must be made aware of the longevity of a product and its available repair options. The end goal is to encourage longer product lifespans, particularly by addressing planned obsolescence for both software and material goods. |
| March 2021 | The right-to-repair policy was passed into legislation in Great Britain, the EU, and Ireland and approved on this date. These new legislations can potentially extend the lifespan of a product by up to 10 years while also reducing 1.5 million tons of e-waste. |

## Possible Challenges & Solutions

**Government Interventions:** Consumer choices are largely influenced by the actions taken by governments. Government regulations or agreements can be implemented to limit wasteful practices, subsidies for sustainable production, full-cost pricing and taxing, and provide education in order to reverse the trend of electronic waste accumulation. Actions as such can be taken to advocate for circular production, starting from the designing stage. To counter establishments that refuse to sell replacement parts, some jurisdictions have implemented right-to-repair laws for certain products. The legislation obliges producers to keep stock of spare parts, an example of this practice is the EU setting legislation starting from 2021 to require appliance manufacturers to supply spare parts for up to 10 years. This will eventually involve a number of European-wide initiatives to increase product reparability, such as pushing manufacturers to make electronics repair simpler and steps to enhance the overall economic environment for repair.

**Reduce wasteful production:** The output-oriented approach is heavily criticised in modern business models, where production operators only consider the product. When an output-oriented product system is broken down to its core, we can find that it is designed to produce waste. In order to overcome this cycle of wasteful production as an offshoot of manufacturing goods, a shift towards input-oriented production is necessary. It is crucial to think about the value of all resources, how to conserve them, and how to use them efficiently with the least amount of waste produced. Embracing moderate consumption and putting an end to the period of excessive indulgence is essential in order to reverse the trend of waste production, carbon emissions, and general ecological overshoot.

**Producing repairable devices:** Choosing to repair devices rather than replacing can save money for its users, however, customers might be more inclined to purchase a new model rather than repair an old one as it seems more cost-efficient that way. An example of this is printers which are deliberately sold at a cheap price, and as fixing the device takes a huge amount of time and money, customers would be more inclined to purchase a new one in order to save both time and money. However, it is important for companies to make their devices easy and more cost-efficient to repair devices to not only aid customer convenience but also to cut down the release of electronic waste. Some manufacturers have already started taking these actions and rightly receive positive recognition for them. For instance, Dell and HP are providing consumers with access to repair manuals and replacement parts. Microsoft has also redesigned its Surface tablets in order to make them easily repairable.

**Promote Green Technological Innovation:** By assisting enterprises in developing more environmentally friendly electronic devices, technological innovation can lessen the environmental impact of planned obsolescence. The circular economy, which emphasises reuse, repurposing, and recycling, is one method of raising an economy's carrying capacity. Designing long-lasting products would reduce consumption, particularly in terms of replacement due to wear. Using durable and eco-friendly materials to manufacture a product would ensure a long service life and minimise effects on the environment after it becomes unusable. The effects of planned obsolescence can be avoided by promoting a more sustainable and circular economic model with morally and responsibly produced goods and services.

**Modular Technology:** As technological innovation is integral to the advancement of society, an effort towards decreasing waste while innovating technology should be made. Making devices modular would help reverse the cycle of obsolescence due to technological advances. Modular devices are designed to be swapped in and out hence making them more repairable and accessible to updates without customers having to purchase an entirely new device.

**Making independent repair services accessible:** Most users of laptops and computers are more likely to want to fix their current devices rather than purchase a new one. However, when manufacturers limit the supply of spare parts and replacements, it not only causes inconvenience for consumers but also makes it difficult for independent repair shops. For a given number of resources, more jobs and economic activity would arise from high-quality products, robust repair and servicing, and second-hand marketplaces. If consumers spend less on disposable goods, they will be spending more on other services and investments.

## Recommendations for Resolution Writing including Research

The Chairs advise delegates to learn about the issues raised by planned obsolescence and what their respective countries are doing to address them. For instance, some of the key issues include the detrimental effect on the environment through mass production of e-waste, loss of digital security and poor financial decisions made by consumers. Along with discussing the problems, the delegates must also discuss how to prevent them if their country supports regulations against planned obsolescence. Delegates should talk about legislations set by the government to minimise the effects of planned obsolescence, for example, the US and countries in the EU can talk about the right to repair bills and how that is effective and necessary.

However delegates can base their arguments about the expense of the materials needed to make electronic devices survive longer; if the best resources are utilised to manufacture all devices, then the cost of the goods will be too high for consumers to afford. Obsolescence of technology goes hand in hand with technological innovation, which is a crucial component of societal development suggesting that obsolescence in many cases is inevitable.

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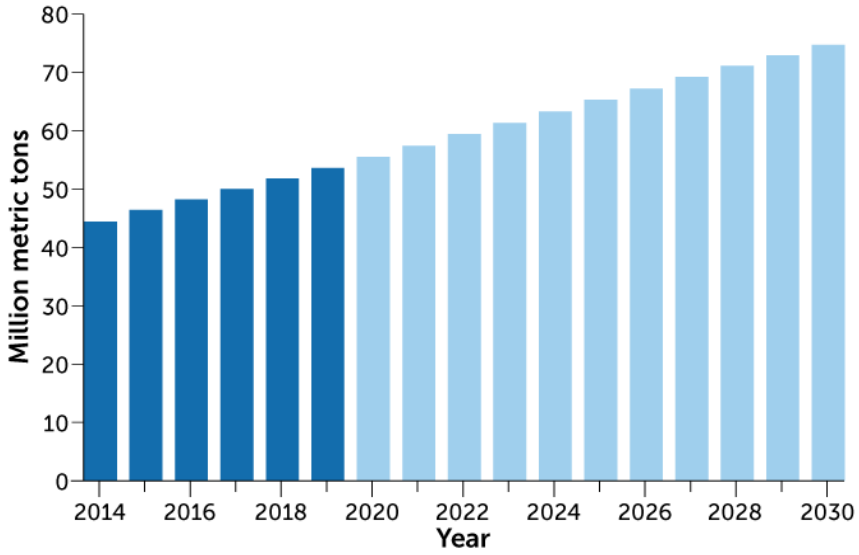
## Additional Resources

E-waste Accumulation

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