**Right to Repair**

* Right to repair is a legal entitlement enabling owners of devices to modify and repair their products.
* Some manufacturers, notably Apple, impose restrictions such as “parts pairing,” where the device displays a permanent message if non-authorized parts are installed; only the manufacturer can remove this message.
* A shift in product design towards longer lifespans would reduce the environmental impact associated with manufacturing.
* Right to repair typically appears as either open access, where users have a choice in repair providers, or closed access, where they are restricted to manufacturer-approved services.
* Manufacturers often lack financial incentives to offer repair documentation or spare parts, as doing so might aid competitors and lower new product sales.

**Legislation**

* Laws can compel manufacturers to provide spare parts and repair information.
* In 2021, the UK mandated that manufacturers supply spare parts and maintenance data for certain household appliances, though consumer electronics were excluded.
* These repairs must be achievable using standard tools.
* In 2023, U.S. regulators required John Deere to permit farmers to repair their own equipment instead of relying solely on authorized services.
* Intellectual property laws can impede repair efforts by restricting access to repair manuals and the production of replacement parts.
* Legislation has yielded progress in specific sectors; however, gaps remain—especially for consumer electronics—indicating that further legal reforms are needed.

**Planned Obsolescence**

* Planned obsolescence involves deliberately designing products with a limited useful life to encourage repeat purchases.
* Manufacturers may design devices with non-replaceable batteries or use software updates that degrade performance over time.
* Aesthetic changes in new models can also create social pressure to upgrade unnecessarily.
* The environmental cost of producing and disposing of devices highlights the need for improved design and a shift in consumer attitudes toward reuse.

**Apple Case Study**

* Apple’s practices serve as a case study in the challenges of balancing corporate control with consumer repair rights.
* Apple has faced legal scrutiny over allegations of planned obsolescence and restrictive repair practices.
* In 2016, Apple acknowledged slowing older iPhones “to prevent unexpected shutdowns.”
* The company’s parts pairing policy complicates repairs by independent technicians or users without specialized tools.
* In 2022, Apple introduced a “Self Service Repair” program, offering limited access to parts and manuals for individual users.
* Preliminary evaluations indicate that while the Self Service Repair program enhances repair options for technically proficient users, its restricted parts inventory and dependence on proprietary tools limit its overall effectiveness.