**Product / Service:** Large-Scale & Benchtop Science Equipment (Purchase / Lease / Consumables / Maintenance)

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|  | **Negative Impacts / Risks** |  | **Positive Opportunities** |
| **Environmental** | * Production – high carbon production process, including non-recyclable & non-renewable materials & water (impact on biodiversity / mining impacts) * Energy & water use of equipment (carbon impact) * Vehicle fuel & emissions (carbon impact) – high order frequency of consumables, low value equipment & multiple maintenance visits * Equipment & consumables may be delivered in excessive packaging * Disposal of equipment, parts & consumables (short-life span / rapid obsolescence – adding to landfill) – may include hazardous waste | * Share equipment (decline in production / energy use / disposal) * Energy efficient equipment (e.g. EnergyStar) * Consolidated orders & reduced delivery frequency of consumables & low value equipment * Low CO2 vehicles for delivery & maintenance visits * Alternatives to maintenance staff physically attending site e.g. remote access support * Consolidate maintenance visits across sites / consider on-site engineers * Reduce levels of packaging / use recycled packaging * Equipment & consumables recycling / stripping assets for re-use |
| **Social** | * International manufacturing supply chains (potential for issues such as child labour / poor pay & working conditions / health and safety breaches) * Working conditions of maintenance staff (long hours / low pay) * Frequency & timing of deliveries & maintenance visits – congestion & noise impacting residents | * Maintenance staff - local employment / living wage * Apprenticeship opportunities * Consolidated orders, deliveries & maintenance visits (including shared contracts) * Donation of equipment or over-orders to charity / schools |
| **Economic** | * Multiple purchases of individual items of equipment (potential duplication) * Under-utilisation (depreciating asset) * Poor inventory management may result in over-ordering of consumables / leftover stock / high storage costs * Cost of energy used by equipment * Multiple maintenance visits across sites – inefficient & costly * Waste disposal costs | * Share equipment (overall cost reduction), use loan/demo equipment & rationalise suppliers * Consider whole life cost of purchase v hire * Reduce waste through effective inventory management / redistribute over-orders of consumables internally * Energy efficient equipment (e.g. EnergyStar) – reduce energy bills * Consolidate & align maintenance contracts across sites * Sell old machines for parts/metal scrap * Utilise part exchange / buy-back schemes with suppliers |

**RELATED PROC HE:** DA / ED / EC / LC / LGA / LM / WL