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