**Product / Service:** Gases (Science)

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|  | **Negative Impacts / Risks** |  | **Positive Opportunities** |
| **Environmental** | * Limited natural resource * Damage to rock strata from natural gas extraction * Risk of air or water course pollution from gas processing plant * Vehicle fuel & emissions (carbon impact) – regular order frequency * Gases may be hazardous by nature (risks in handling & storage) and result in hazardous waste (expensive to transport, store & dispose of) | * Computer modelling techniques in research may avoid use * Consolidated orders & reduced delivery frequency (bulk orders) * Low CO2 vehicles for delivery * Capture waste gases for re-use/re-sale |
| **Social** | * International manufacturing supply chains (potential for issues such as child labour / poor pay & working conditions / health and safety breaches) * Working conditions of delivery staff (health & safety / long hours / unsocial hours / low pay) * Frequency & timing of deliveries – congestion & noise impacting residents | * Potential investment in apprenticeships * Consolidated orders & deliveries (including shared contracts) * Potential benefit to society in identifying solutions to medical problems |
| **Economic** | * Inefficient storage or transport – gas leakage * Potential duplication of purchases across multiple sites - disconnected orders / multiple delivery charges * Poor inventory management may result in over-ordering / leftover stock / high storage costs / rental costs for obsolete cylinders * Waste disposal costs | * Rationalise suppliers & deliveries (common gases) * Reduce waste through effective inventory management / redistribute over-orders internally * Spend supports investment in new products / medical research by suppliers |

**RELATED PROC HE:** LN