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Threat Briefing - Part 2

Australia | 04 May 2026

Oil Crisis 2026

Pathway to Disruption

This Threat Briefing examines the implications of sustained oil price volatility and supply disruption arising from the Iran conflict, with a primary focus on petrochemical exposure and downstream economic impacts for Australian businesses. It assesses the escalating risk that prolonged disruption could constrain fuel and petrochemical supply, amplifying operational, supply chain and pricing pressures across multiple sectors.

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Threat Rating: Very High

Executive Summary

Australia's fuel risk environment has entered a new phase. What was previously characterised by episodic global price shocks has evolved into a structurally volatile system shaped by constrained refining capacity, short-term procurement and intensifying geopolitical competition.

A defining feature of this shift is Australia's increasing reliance on the spot market to secure refined fuel. This model embeds continuous exposure to month-to-month price fluctuations, supply competition and reduced predictability. Unlike long-term contracted supply, spot procurement transfers volatility directly into national energy security and business operations.

At the same time, geopolitical dynamics are becoming a primary driver of access to energy. The Australian Government is pursuing regional agreements and leveraging energy exports to stabilise supply; however, fuel and petrochemical flows are now increasingly influenced by strategic alignment, trade positioning and regional security conditions rather than purely market forces.

This exposure is compounded by limited domestic fuel stockholding. While total coverage is estimated at approximately 50 to 60 days in line with International Energy Agency obligations, a significant proportion is held offshore and remains dependent on stable shipping routes and geopolitical conditions. In a protracted disruption, this materially reduces Australia's effective buffer.

The most significant escalation risk sits within the petrochemical supply chain. Petrochemicals, derived from oil and gas, are foundational inputs across plastics, packaging, fertilisers, pharmaceuticals, construction materials and industrial manufacturing. As upstream energy markets tighten, these inputs are experiencing sustained cost increases, extended lead times and growing supply constraints.

A further emerging risk sits within specialty and industrial gases linked to the same energy systems. Gases such as helium, produced as a by-product of natural gas processing in the Gulf, are critical to semiconductor manufacturing, healthcare and advanced technologies. Disruption to LNG infrastructure or shipping routes therefore extends beyond petrochemicals into high-tech supply chains, amplifying downstream impacts.

In a protracted conflict scenario, these pressures are unlikely to stabilise quickly. Instead, they compound over time as inventories deplete, procurement cycles shorten and global competition for constrained supply intensifies. This creates a lagged but more persistent impact than fuel price spikes alone, embedding cost escalation deep within production systems and supply chains.

These dynamics are now being felt across the broader economy. Rising petrochemical input costs are driving increases in prices of goods, disrupting manufacturing continuity and amplifying cost-of-living pressures. For Australian businesses, this represents a shift from short-term price volatility to sustained margin compression, operational disruption and reduced certainty.

Australia is therefore facing a dual-layer disruption pathway from fuel volatility to petrochemical disruption to economy-wide cost escalation.

Schedule a 30 minute Disruption Risk Impact Analysis with the Howden Risk Advisory Team by clicking here.

Fuel Market Dynamics

Australia's historical fuel security model has relied on stable imports from regional refineries, supported by commercial supply chains and predictable contracting arrangements. This model is now weakening under sustained geopolitical disruption. Conflict in key energy regions, the weaponisation of supply, and increased competitior for cargoes are eroding the reliability of established trade flows.

As a consequence, we now have greater reliance on spot market procurement to fill supply gaps. Under this model, fuel is purchased on short notice based on availability and price, rather than secured through long-term agreements.

This shift introduces three interrelated risks:

- Price volatility is significantly increased. Spot market pricing is highly sensitive to geopolitical developments, shipping disruption and regional demand. For Australia the most relevant indicators are Singapore refined product benchmarks: Mogas 95 for petrol and Gasoil 10 ppm for diesel. These benchmarks capture the real delivered-fuel exposure facing Australian businesses. As an example, Singapore Gasoil 10 ppm was trading near peak levels at USD178 on 30 April 2026, compared to the global WTI crude oil benchmark price of USD107 per barrel.
- Supply certainty is reduced. Access to fuel is no longer assured and is increasingl influenced by global competition, with larger economies often securing priority.
- Planning horizons are compressed. Businesses and government agencies face growing difficulty forecasting fuel costs and availability, undermining operational planning, budgeting and risk management.

These risks are amplified by Australia's limited domestic stockholding. While headline figures suggest an increase to 50 to 60 days of coverage, only approximately 20 to 30 days is physically held within Australia. The balance is helc offshore and requires access to shipping and stable geopolitical conditions to be realised.

In a disruption scenario, this reduces effective resilience. Delays in resupply or increased competition for cargoes can rapidly compress available supply, particularly for critical fuels such as diesel and aviation fuel. The central risk is therefore not total stockholding, but the ability to sustain continuous supply under disrupted global conditions.

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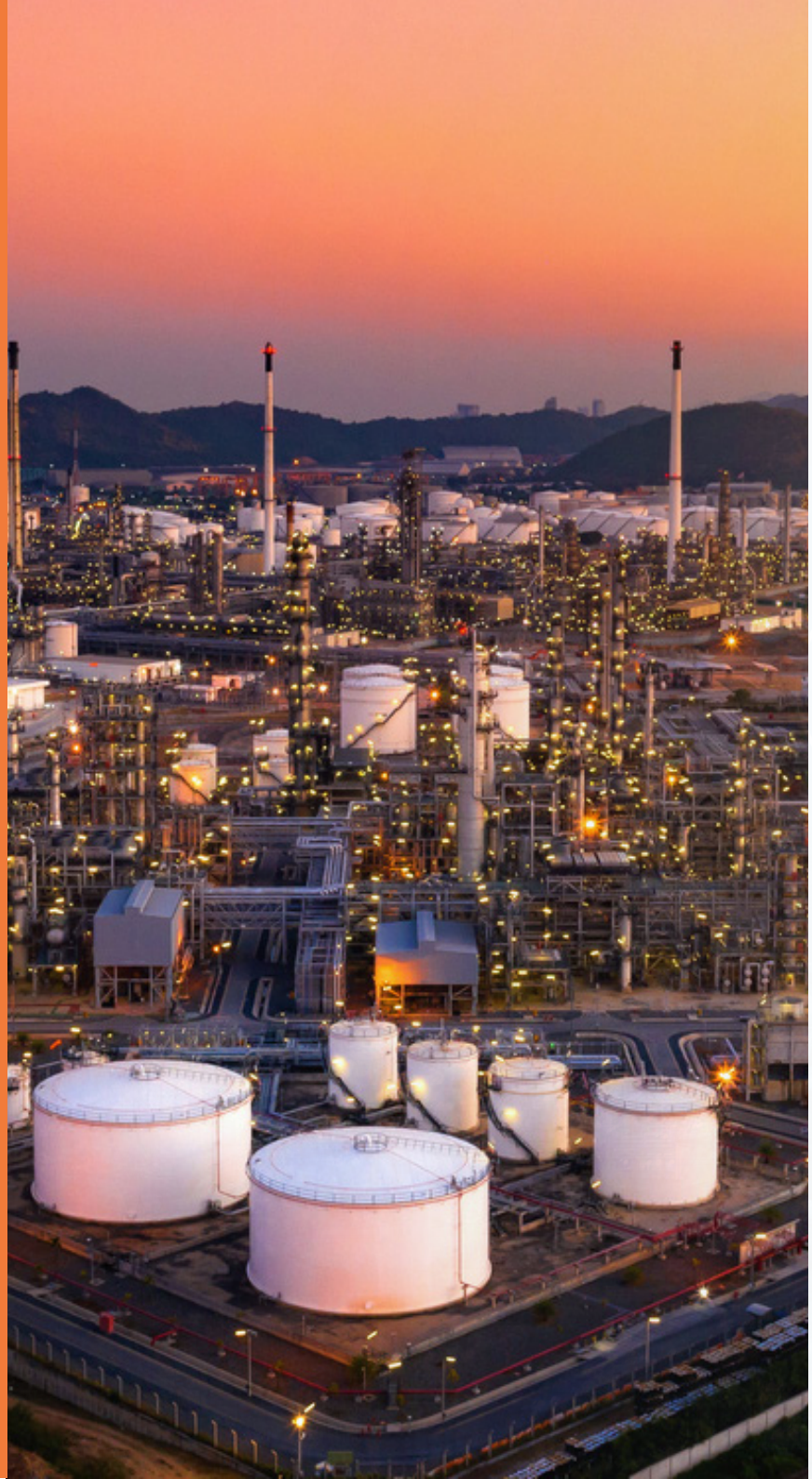
Key Insights

- Fuel volatility has become structural rather than episodic, driven by geopolitical tension, constrained refining capacity and increased reliance on spot market procurement.
- Diesel and jet fuel remain the most exposed products due to high demand, limited domestic capacity and reliance on imported middle distillates.
- Australia's fuel security is now shaped as much by global competition and geopolitical alignment as by traditional market access and pricing mechanisms.
- The primary risk is shifting from fuel cost to petrochemical availability as inventories tighten and upstream constraints flow through to critical inputs.
- Petrochemical disruption creates a delayed but more persistent impact than fuel price spikes, embedding cost and availability pressures deep within supply chains.
- Specialty gases such as helium sit outside petrochemicals but rely on the same LNG and energy infrastructure, meaning disruption in the Gulf can quickly constrain supply to semiconductors, healthcare and advanced manufacturing, with limited alternatives and high downstream impact.
- Supply chain fragility is increasing as just-in-time models are tested by longer lead times, constrained logistics and reduced supplier flexibility.
- Cost pressures are becoming embedded across the economy, sustaining inflation and driving ongoing margin compression for businesses.



Government Response

In response to these dynamics, the Australian Government has accelerated fuel security measures to strengthen supply resilience. This includes deepening relationships with key refining nations (Singapore, South Korea and Japan), expanding minimum stockholding obligations, and progressing additional onshore storage to reduce reliance on offshore reserves. Central to this approach is the four-level National Fuel Security Plan, endorsed by National Cabinet.

LEVEL 1 PLAN AND PREPARE	Government and industry planning, preparedness, monitoring and coordination to strengthen fuel supply resilience.
LEVEL 2 KEEPING AUSTRALIA MOVING	Coordinated national measures to keep Australia moving, including fuel-saving actions, supply support and continued government-industry coordination.
LEVEL 3 TAKING TARGETED ACTION	Targeted government action to protect fuel security, including focused interventions for priority sectors, regions and supply chains.
LEVEL 4 PROTECTING CRITICAL SERVICES	Strongest measures to protect critical services for all Australians, including direct government intervention and allocation controls if required.

The plan is designed to guide how Commonwealth, state and territory governments work with industry to monitor supply, manage demand, coordinate distribution and, if required, prioritise fuel for critical services. It clarifies escalation pathways and signals that any movement between levels will be managed through National Cabinet rather than left solely to market response.

This has now been reinforced by a broader federal fuel security package, including a proposed government-owned fuel reserve of around one billion litres, an increase to minimum stockholding obligations by around 10 days for each fuel type, and measures intended to expand onshore diesel and aviation fuel storage toward at least 50 days of supply.

However, these measures are primarily designed to manage disruption once pressure emerges, rather than remove Australia's exposure to global fuel markets. The plan improves national coordination and prioritisation, but Australia remains dependent on imported refined fuel, international shipping routes, regional refining capacity and market access during periods of geopolitical stress. As a result, near-term risk persists.

Australian businesses should continue to expect fuel price volatility, localised availability pressures, increased competition for supply, and rising freight and logistics costs. These conditions should be treated as an enduring operating constraint, not a temporary disruption.

Disruption Scenarios

Event 1: Fuel supply constraints

While current conditions are defined by price volatility rather than physical shortage, the risk of future fuel supply disruption, particularly for diesel and jet fuel, remains credible under a protracted or escalating conflict. At present, near-term disruption is unlikely. Government actions and diversified sourcing are supporting supply continuity, with global flows remaining functional despite supply pressure and price volatility. However, this position depends on stability across key supply routes and production infrastructure.

The most significant escalation pathway aligns to Scenario 3 from our previous Threat Briefing, where conflict intensifies and infrastructure is directly targeted. This could involve a resumption of US strikes, this time targeting Iranian infrastructure, followed by Iranian retaliation against oil production, storage or export facilities in the Gulf; or disruption to critical shipping routes such as the Strait of Hormuz or Red Sea.

Under this scenario, the risk shifts from price volatility to physical supply constraint. Diesel and jet fuel are particularly exposed due to Australia's reliance on imported middle distillates, limited domestic refining capacity and dependence on uninterrupted shipping and regional refining output.

Any disruption to Gulf production or transit routes would tighten global supply, forcing import-dependent markets to compete for reduced volumes. This would likely result in cargo delays, declining inventories and increased government intervention under the National Fuel Security Plan. Given the highly unpredictable nature of the conflict, this represents a high-impact risk scenario that could rapidly shift conditions from cost pressure to supply insecurity.

Business implications:

- On-going fuel rationing and fuel prioritisation toward essential sectors.
- Freight disruption and reduced transport reliability.
- Project delays and operational slowdown across fuel-intensive sectors.
- Reduced economic demand across multiple sectors.
- Sustained inflationary pressure.

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Disruption Scenarios

Event 2: Petrochemical supply-chain impacts

The most significant emerging risk now centres on the petrochemical supply-chain, particularly as inventories across key inputs continue to tighten. Petrochemicals underpin modern industrial and consumer economies. Derived from oil and gas, they are embedded across plastics, fertilisers, pharmaceuticals, construction materials, textiles and packaging systems. Refer to Appendix 1 for a list of affected products and sectors.

As energy markets tighten, petrochemical production is directly impacted through higher feedstock costs, constrained refining output and prioritisation of exports by producing nations. As existing inventories are drawn down, this shifts pressure downstream, creating cascading disruption across supply chains.

The impact is not uniform. Exposure is concentrated in sectors with high dependency on petrochemical inputs and limited substitution options. The interaction between energy markets and petrochemical production creates a clear disruption pathway that will cascade throughout the Australian economy. Energy volatility drives up feedstock costs and constrains output, leading to manufacturing disruption, supply shortages and rising input costs that are ultimately passed through to businesses and consumers.

The most critical areas of impact include:

- Food systems, through fertiliser availability, transport costs and packaging.
- Healthcare, through pharmaceutical inputs and medical plastics.
- Construction, through materials, bitumen and resins.
- Logistics, through fuel dependency and packaging constraints.

These interconnected pressures increase the likelihood of compounding, cross-sector disruption as inventories continue to deplete.

Business implications:

- Shift from price volatility to input scarcity as inventories deplete.
- Margin compression from sustained fuel and petrochemical cost increases.
- Increased exposure from concentrated supply chains and minimal inventory buffers.

Disruption Scenarios

Event 3: Specialty gas supply disruption

A further escalation pathway sits outside fuel and petrochemicals but remains linked to the same Gulf energy system. The Gulf is a major source of LNG-linked industrial gases, with Qatar alone producing roughly 30% of global helium supply. Helium is recovered as a by-product of natural gas processing and is critical to semiconductor manufacturing, medical imaging, fibre optics and advanced technologies.

This risk is amplified by demand dynamics. AI growth is driving sustained demand for advanced semiconductors, high-bandwidth memory and data centre infrastructure. As an example, Samsung has warned chip shortages could worsen by 2027 due to rising demand and limited production expansion

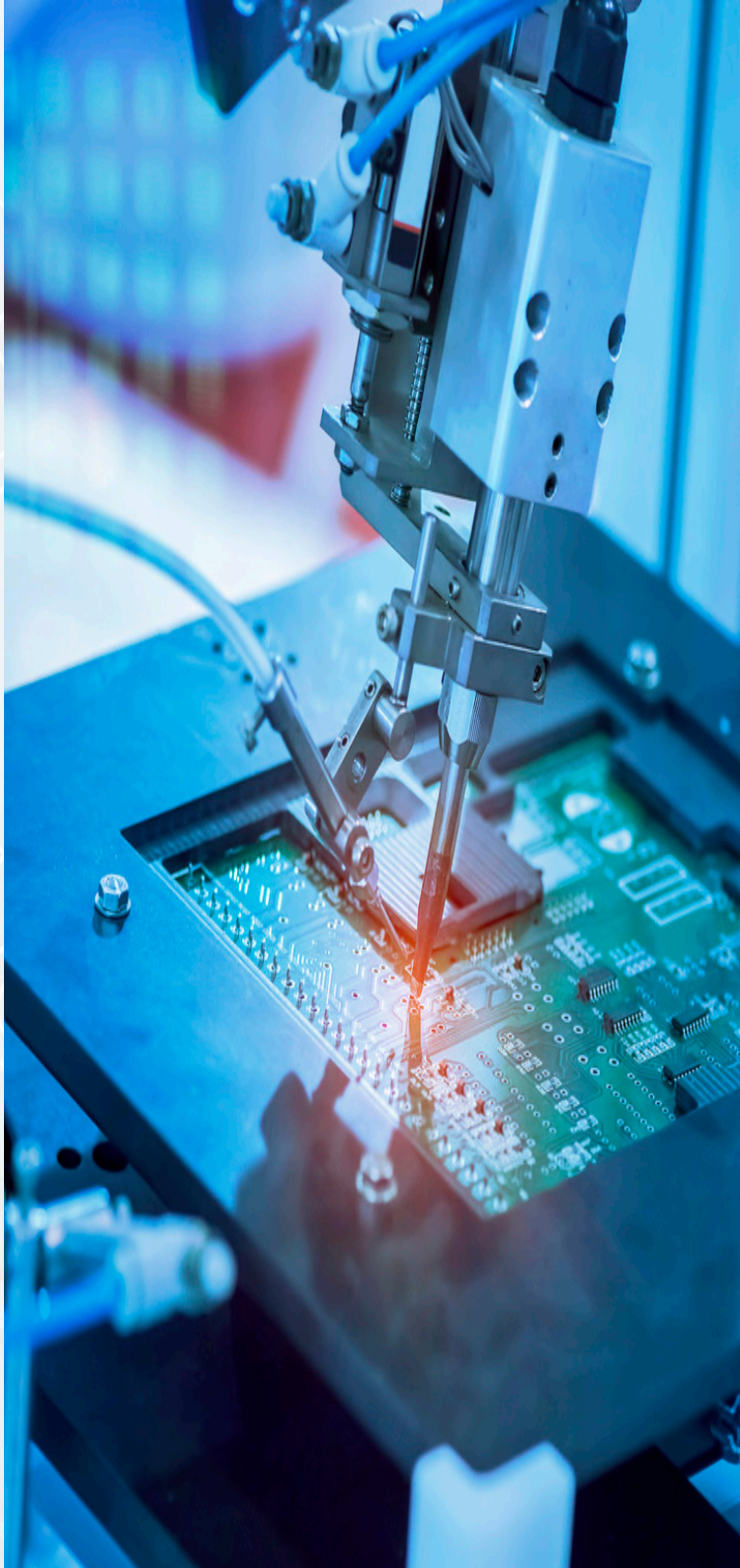
The immediate impact may be manageable where manufacturers hold inventories or have diversified supply. However, in a prolonged Gulf disruption, helium availability could tighten, prices could rise, and supply could be prioritised to healthcare and critical industries.

For Australian businesses, the impact would be indirect but material through higher costs and delays for imported electronics, semiconductors, medical equipment, telecommunications hardware and AI/data centre infrastructure.

Gulf disruption is not just an oil and petrochemical risk; it also threatens specialty gases that underpin semiconductor and AI supply chains.

Business implications:

- Higher costs and delays for semiconductors and electronics.
- Allocation risk prioritising critical sectors and major buyers.
- Delays to IT, cloud and AI infrastructure deployment.
- Increased costs for data centre build and expansion.
- Disruption to medical equipment and healthcare supply.
- Greater reliance on constrained global suppliers.



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Overall Assessment

Australia is entering a prolonged period of energy and economic volatility. Greater reliance on spot fuel procurement is increasing exposure to price instability, supply competition and reduced predictability, while limited domestic stockholding constrains the ability to absorb disruption. Petrochemical dependency, and emerging constraints in specialty gases linked to LNG systems, are amplifying second-order impacts across supply chains, industrial production and essential services.

The result is a systemic disruption pathway defined by sustained fuel volatility, supply chain instability and rising economic pressure. This environment requires a shift in how organisations and policymakers approach energy security and supply chain resilience. Organisations should prioritise:

- Assessing exposure to fuel price volatility and disruption.
- Mapping petrochemical dependencies and critical inputs.
- Diversifying suppliers and increasing inventory buffers.
- Reviewing pricing and cost recovery mechanisms.
- Strengthening logistics and operational resilience.
- Engaging with government and industry on supply continuity.

Fuel and energy security risks are no longer isolated, they are central to economic stability, supply chain resilience and national capability.

Actions for Organisations:

- Monitor supplier conditions, freight markets and fuel/petrochemical pricing.
- Stress test budgets for sustained increases in fuel, freight, travel and input costs.
- Assess exposure to diesel, jet fuel and petrochemical-dependent operations and suppliers.
- Engage key suppliers on contingencies, prioritisation and allocation risk.
- Plan for longer lead times, reduced flexibility and potential supply constraints as inventories tighten.
- Embed these scenarios into crisis management, business continuity, supply chain and customer communication plans.

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Understanding Impacts on Insurance

In the current environment, it is critical for organisations to review their property insurance programme to ensure it remains fit for purpose.

Volatility in global energy and petrochemical markets increases the likelihood of physical damage, operational disruption and cost escalation, while also raising questions around policy triggers, exclusions and adequacy of limits.

A structured review helps confirm that declared values, sums insured and coverage assumptions remain aligned with today's risk profile, rather than historic operating conditions, and that key exposures arising from disrupted fuel, energy or input supply have been appropriately considered.

In particular, business interruption cover warrants careful scrutiny. Many losses arising from the current situation are more likely to manifest as downstream disruption, such as shortages of critical materials, increased input costs, transport delays or reduced output, rather than direct physical damage. Organisations should assess whether their BI cover responds adequately in these scenarios, including the operation of indemnity periods, sub limits, waiting periods, and any dependency or non damage extensions.

Understanding how exclusions, especially those relating to war, sanctions or government action, may apply is equally important. Proactively reviewing BI arrangements now helps reduce uncertainty, protect balance sheets, and supports better decision making if disruption escalates or persists.

Disruption risks are evolving rapidly.

Now is the time to reassess whether property and business interruption cover remains fit for purpose.

Appendix 1- Petrochemical Dependency: Product and Sector Exposure

Product / Input	Key Industries Impacted
Fertilisers (urea, ammonia, phosphates)	Agriculture, food production
Diesel / middle distillates	Transport, mining, agriculture, logistics
Jet fuel (aviation turbine fuel)	Aviation, tourism, freight
Plastics and polymers (PE, PP, PVC)	Manufacturing, packaging, healthcare, construction
Industrial chemicals (methanol, ethylene, propylene)	Manufacturing, mining, chemicals
Pharmaceuticals (active ingredients, solvents)	Healthcare, pharmaceuticals
Medical plastics and consumables (PPE, syringes, IV bags)	Healthcare
Bitumen and asphalt	Construction, infrastructure
Resins, adhesives and coatings	Construction, manufacturing, automotive
Packaging materials (rigid and flexible plastics)	Food, retail, logistics
Food-grade plastics and films	Food production, cold chain, retail
Tyres (synthetic rubber, carbon black)	Transport, mining, logistics
Electrical and electronic components (insulation, casings)	Energy, construction, manufacturing
Mining chemicals (explosives, ammonium nitrate)	Mining, resources
Water treatment chemicals	Utilities, infrastructure, public health
Lubricants and industrial oils	Manufacturing, transport, mining
Agricultural chemicals (pesticides, herbicides)	Agriculture
Refrigerants and coolants	HVAC, cold chain, healthcare
Solvents and cleaning agents	Manufacturing, healthcare, industrial services
Detergents and surfactants	FMCG, food processing, healthcare
Synthetic fibres (polyester, nylon)	Textiles, retail
Consumer goods inputs (cosmetics, detergents)	Retail, FMCG

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