

Sheltering from Oil Shocks

Measures to reduce impacts on households and businesses

International
Energy Agency



INTERNATIONAL ENERGY AGENCY

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Summary

The conflict in the Middle East has created the largest supply disruption in the history of the global oil market, due to the near halt in shipping traffic through the Strait of Hormuz. Some 15 million barrels of crude oil and 5 million barrels of oil products typically traversed the Strait each day, equivalent to around 20% of global oil consumption. These flows have slowed to a trickle. The loss of supply is having significant impacts in global markets, pushing up prices for crude oil above \$100/barrel, and leading to much higher prices for some refined products – notably diesel, jet fuel and liquefied petroleum gas (LPG). Concerns are growing about the impacts of higher prices on households, businesses and the broader economy.

The resumption of transit through the Strait of Hormuz is the single most important action to return to stable oil and gas flows and reduce the strains on markets and prices. In the interim, countries around the world are taking a range of measures to increase supply and to reduce the impact of sharp price rises on consumers. On the supply side, IEA member countries took a crucial step on 11 March by making 400 million barrels of oil from their emergency reserves available to the market, the largest stock release in IEA history. But the demand side is also a crucial part of the energy security equation.

In this report, the IEA details 10 demand-side options open to households, businesses and governments to shelter themselves from today's oil shock and relieve the strains on affordability. These are based on the IEA's longstanding expertise on energy security and on specific country examples. Governments can take the lead, both by setting an example and by facilitating these actions, but many can be adopted by individuals and businesses directly. Most of these options relate to consumption of road transport fuels, but they also cover fuel use for air transport, cooking and industry.

For road transport, the key options are to:

- **Work from home where possible:** Working from home can significantly reduce oil consumption from commuting. At the national level, three additional remote workdays, for those whose jobs allow for it, could cut oil consumption from cars by 2%-6%, with average potential reductions of around 20% for individual drivers.
- **Reduce speed limits on highways by at least 10 km/h:** Lowering the speed limit on highways by 10 km/h can reduce an individual driver's oil consumption by 5% to 10% and overall oil use for private cars by 1% to 6%. Heavy freight trucks can save around 5% due to their already lower speeds.
- **Encourage public transport:** Shifting travel away from private cars to public transport, such as buses and trains, can reduce national oil use for cars by 1% to 3%. Options like cycling and walking for shorter journeys can lead to further reductions.

- **Alternate private car access to roads in large cities on different days:** Limiting cars' access in designated zones to specific days based on their number plate could reduce traffic congestion, engine idling and fuel-intensive stop-and-go driving, with savings of 1% to 5% of national car oil use.
- **Increase car sharing and adopt efficient driving practices:** Carpooling increases car occupancy and relieves road congestion, reducing travel times and car usage. When combined with eco-driving measures, including checking tyre pressure, adjusting air conditioning settings, and efficient driving practices, fuel demand for cars can be reduced by around 5% to 8%.
- **Efficient driving for road commercial vehicles and delivery of goods:** Eco-driving practices, including regular checks of tyre pressure, reduced idling, and reduction of braking and accelerating, combined with operational improvements, such as optimisation of vehicle loads, can reduce fuel demand for road commercial vehicles by 3% to 5%.
- **Divert LPG use from transport:** Around 2% of the global car fleet runs on LPG. Switching on gasoline in converted vehicles or bi-fuel ones can preserve LPG supplies for prioritised uses, such as cooking.

For air transport fuels, cooking fuels, and industry:

- **Avoid air travel where alternative options exist:** A reduction of around 40% of flights taken for business purposes is feasible in the short term and, with very high participation in work-related flight reduction campaigns, could reduce jet kerosene demand by 7% to 15%.
- **Where possible, switch to other modern cooking solutions:** As LPG supply becomes increasingly constrained, greater adoption of electric and other alternative modern cooking solutions could manage potential cooking fuel shortages alongside other measures to conserve LPG in other non-essential applications.
- **Leverage flexibility with petrochemical feedstocks and implement short-term efficiency and maintenance measures:** Prioritising the processing of oil feedstocks with higher volumes available can release pressure on other oil products. Optimising equipment operations and maintenance can reduce oil use in individual facilities by up to 5%.

As seen in 2022, governments can intervene with measures to help consumers with their energy bills during price spikes – but fiscal means are limited, and it is vital that measures target those most in need. Over the longer term, the report also provides guidance on structural measures that can help improve energy security and limit exposure to future shocks.

The IEA was founded more than 50 years ago with a core mission of upholding energy security in response to global oil shocks. The current crisis extends well beyond oil, and includes disruptions to natural gas flows, with knock-on effects for electricity security and prices. The IEA continues to work closely with governments around the world as they consider and develop options for responding to the current disruption.

Introduction and context

The conflict in the Middle East has created the largest supply disruption in the history of the global oil market. The volume of fuel supply offline now is higher than the supply loss during the oil shock of 1973 that led to the IEA's creation and any disruption since then. Beyond the direct damage to energy infrastructure in the region, the crisis has led to a near halt in tanker movements through the Strait of Hormuz. Crude and oil product flows through the Strait have fallen from around 20 million barrels per day (mb/d) before the conflict to a near standstill. With limited capacity to bypass the waterway and storage filling up, Gulf countries have cut oil production by at least 10 mb/d. In the absence of a rapid resumption of shipping flows, supply losses are set to increase.

This loss of supply is having major impacts in global oil and gas markets, with both producers and consumers feeling the strain. Oil prices have risen sharply since the conflict began. While Brent has drawn most attention, benchmarks for Middle Eastern crudes and refined products, particularly diesel and jet fuel, have increased even more. Many consumers around the world are still bruised from past price increases during the global energy crisis of 2021-2023, which pushed energy affordability to the forefront of energy policy priorities. A succession of turbulent years for the global economy and the energy sector has also depleted the fiscal means for governments to respond to a new crisis.

The resumption of transit through the Strait of Hormuz is indispensable to relieve the strains on markets and to allow for stable flows of oil and gas to international markets. In the interim, countries are taking or considering a range of measures to mitigate the impacts of the disruption, whether by increasing oil supplies or reducing demand.

On the supply side, IEA member countries decided on 11 March to make 400 million barrels of oil from their emergency reserves available to the market, the largest stock release in IEA history. Other short-term options to increase supply, aside from inventories, are being explored. They are quite limited, however, as operators face constraints in terms of project cycle times, equipment availability, and takeaway capacity.

On the demand side, the products most immediately affected by the conflict are diesel, jet fuel, and LPG. Alongside its well-known role as a producer of crude oil, the Middle East is also a major exporter of these refined products and the interruption to these flows has quickly tightened market balances. Jet fuel supplies are scarce despite the reduction in demand due to the suspension of flights at major airports across the Middle East. In addition to its use as a petrochemical feedstock, LPG is widely used as a cooking fuel.

Demand restraint is one of the emergency response measures that all IEA member countries are required to have ready as a contingency – and that they can use to contribute to an IEA collective action in the event of an emergency like this current disruption. Importantly, opportunities on the demand side are not

limited to only IEA countries. Countries around the world need to consider how they react to today's extreme strains on oil markets.

Governments can support households and businesses to take actions to quickly reduce their oil demand and costs. In this report, the IEA offers 10 options that households, businesses, and governments across the world can pursue immediately to manage their oil demand and help shelter themselves from the oil shock. All 10 options can be implemented quickly, with savings achieved in a matter of weeks.

The description for each option includes estimates of the national savings possible for each specific fuel as well as the implementation levers available to governments and specific country examples. Not all options will apply equally to all countries, depending on their own circumstances in terms of energy markets, transport infrastructure, demand for specific oil products, and other aspects. Nonetheless, the more options that governments, businesses and households adopt would further increase their national, regional and global impact, helping to alleviate the shock for everyone. Even if all 10 options were implemented in every country in the world, however, they would not replace the supply disrupted by the conflict. Only the resumption of transit through the Strait of Hormuz can do that.

The majority of these 10 options focus on road transport fuels, given cars and trucks' outsized influence on total oil consumption – roughly 45% globally and up to two-thirds in some regions. However, the options also consider use of oil for air transport and industry. In addition, they seek to prioritise and protect essential uses of LPG, recognising its central importance as a cooking fuel in many emerging and developing economies.

Following descriptions of the 10 options, the report outlines targeted measures governments can employ to support energy affordability, especially for their most vulnerable consumers, and help offset higher expenditures for oil-related products. Finally, it identifies longer-term structural measures available to governments to reduce exposure to future price shocks and volatility.

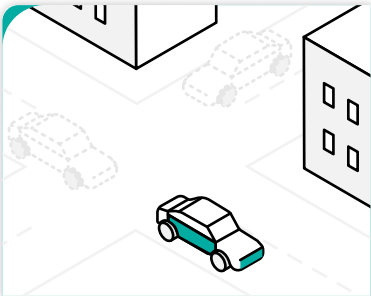
In responding to the current crisis, governments can take the lead, both through measures they implement for the public sector and through regulations and mandates, complemented by public information and awareness campaigns. Ultimately, however, sheltering consumers from the impacts of the oil shock is not only a matter for national governments. Several of the measures can be implemented directly by other layers of government – such as state, regional or local – or just voluntarily followed by households and companies, enabling them to reduce their consumption of oil and save money.

The IEA was founded more than 50 years ago with a core mission of upholding energy security in response to a global oil shock. The current crisis extends well beyond oil, and includes disruptions to natural gas flows, with knock-on effects for electricity security and prices. The Agency will continue to work closely with governments around the world as they consider and develop options for responding to the current disruption.

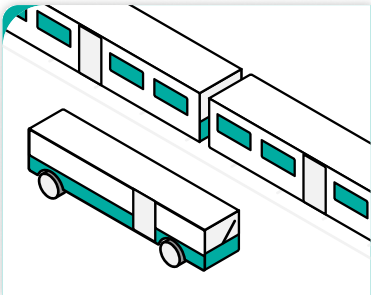
Sheltering from oil shocks



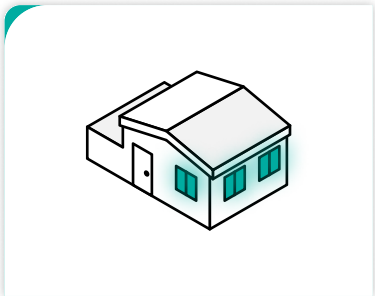
Road transport fuels
Air transport fuels
Cooking fuels
Oil use in industry



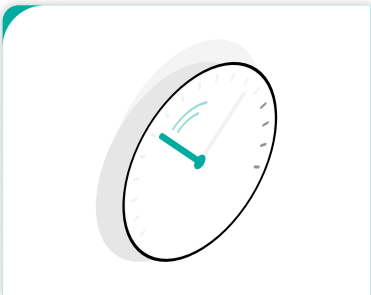
Alternate-day car access
in big cities



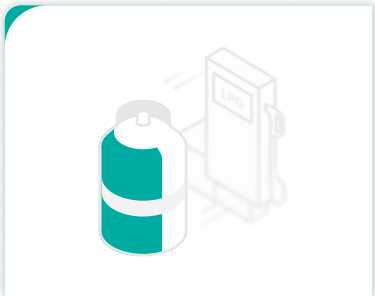
Encourage public
transport use



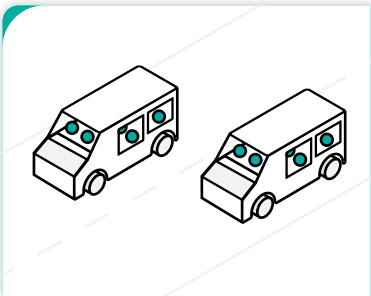
Work from home where
possible



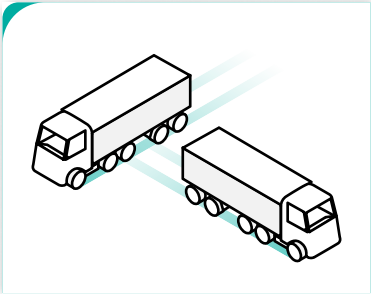
Lower highway speed
limits



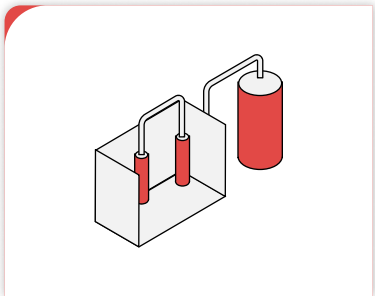
Free up LPG from
transport for cooking



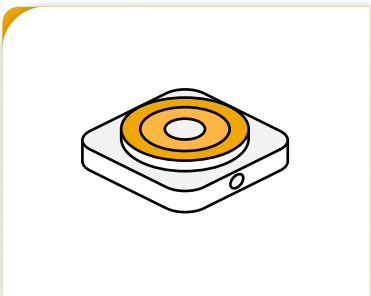
Increase car sharing



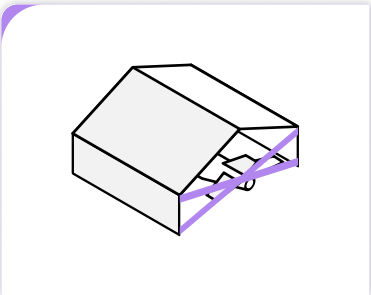
Drive commercial
vehicles efficiently



Be flexible with petchem
feedstocks



Switch to alternative
modern cooking solutions



Avoid air travel if
alternatives exist

Road transport fuels

Road transport accounts for around 45% of global oil demand, ranging from a third in Korea up to two-thirds in some countries in Europe and Latin America. In advanced economies, passenger cars dominate road transport demand, accounting for around 60% of road energy use. Trucks make up most of the remainder. In emerging economies, there is also a significant role for two/three-wheelers (scooters, motorcycles and tricycles), which account for around 5% of road transport demand and are more numerous than cars in many countries. The share of energy use in medium and heavy freight trucks is also higher than in advanced economies.

There are several key actions that can immediately reduce road transport fuel demand and, as a result, lower oil use.

1. Work from home where possible

Description: Working from home can reduce oil consumption from private vehicles used to commute. While not all jobs are suitable for working from home, it can be an effective measure when the job allows for it. In advanced economies, about one-third of jobs are suitable for remote work, while in emerging markets and developing economies, this figure is closer to one-fifth. Working from home affects oil consumption differently across regions, depending on commute distance, car occupancy and average fuel consumption of the car. In most countries the impact is felt mainly on gasoline demand; however, in countries and regions such as Korea, India, and Europe, diesel use is also affected. The effects of working from home also vary by season, largely because of how air conditioning is used in cars. As a result, remote work helps conserve more oil during the warmer months.

Impact: Commuting accounts for between 5% and 30% of car activity across regions. As not all jobs are suitable for working from home, at the national level, three additional remote working days, for those whose jobs allow for it, could reduce oil consumption from cars by 2%-6%. If an average individual driver shifts from no teleworking to three remote days in a five-day workweek, their personal car oil consumption could be reduced by up to 20%.

How can governments enable this: governments can encourage businesses to allow their employees to work from home, and can mandate public officials to work from home, where possible, and close public buildings on certain days.

Policy examples: In response to the 2020 crisis in the Middle East, several countries have announced measures to encourage working from home. For example, the [Philippines](#) and [Pakistan](#) have mandated 4-day workweeks for government workers, while [Sri Lanka](#) has closed public offices on Wednesdays, and [Lao PDR](#), [Thailand](#) and [Viet Nam](#) are all actively promoting remote work. Many European governments also encouraged working from home in response to the energy crisis in 2022-23, including through the joint [IEA-EU Playing my Part Campaign](#). For example, [France](#) incentivised public officials working from home in 2022, and encouraged private companies to follow this example.

2. Reduce speed limits on highways by at least 10 km/h

Description: Lowering the speed limit on highways can reduce oil consumption for passenger cars, light commercial vehicles and trucks. Countries have different speed limits in place across the world, but these typically range from 100 km/h to 130 km/h.

Impact: Reducing its speed on the highway by 10 km/h can cut an individual driver's oil use by 5% to 10%. Such speed limit reductions may decrease national oil use for private cars by 1% to 6%, depending on local infrastructure and driving habits. Heavy freight trucks save less fuel from a 10 km/h speed reduction due to their already lower speeds, but because they use highways much more on average, each heavy freight truck can still cut oil use by around 5% when applying such a measure. This measure affecting heavy trucks primarily reduces diesel demand, as heavy trucks run mainly on diesel. It also lowers gasoline demand, since it affects passenger cars and light commercial vehicles, where around 85% of oil use is gasoline. In some markets, such as Korea, India, and Europe, the reduction in energy use from cars will have a noticeable impact on diesel demand due to the significant share of diesel-powered cars in the overall fleet.

How governments can enable this: Governments can mandate a reduction in speed limits by law or launch an information campaign asking drivers to voluntarily lower their speed. They can also use electronic signs to indicate the requested speed limit. Ahead of a nation-wide policy, governments can start by asking all public workers to voluntarily lower their maximum speed on highways and motorways by 10 km/h.

Policy examples: This is a tried-and-tested policy response in many countries. Already during the first oil crisis in 1973, the French government decreased speed limits to 90 km/h on overland roads and 120 km/h on motorways. France [encouraged reducing driving speed again](#) in response to the 2022 energy crisis. Since the start of the 2026 crisis in the Middle East, [Pakistan](#) has reduced speed limits on motorways and national highways. On motorways, the limit for light-duty vehicles has been reduced from 120 km/h to 100 km/h, and for heavy-duty vehicles from 110 km/h to 90 km/h. On national highways, the limit for light-duty vehicles was reduced from 100 km/h to 80km/h, and for heavy-duty vehicles from 80km/h to 65 km/h. The government also launched an awareness campaign to ensure effective implementation and to inform commuters.

3. Encourage public transport

Description: Shifting travel away from private cars to public transport, such as buses and trains, can reduce oil demand. Most public transport vehicles rely on electricity rather than liquid fuels, but even where they consume oil they are much [more efficient](#) modes of transport. Walking and cycling can further reduce car trips, where practical.

Impact: In some countries, short trips of less than 30 km within large cities can account for up to 50% of oil consumption by private vehicles. Depending on infrastructure, encouraging public transportation could reduce national oil use for cars by 1% to 3%. This measure reduces gasoline demand in most countries, while in regions where diesel-powered cars make up a noticeable share of the car fleet - such as Korea, India, and Europe - it also has a noticeable impact on diesel consumption.

How governments can enable this: In places where public transport infrastructure already exists, governments can reduce fares or make transport free for residents to incentivise a shift away from private cars. Care should be taken to ensure such supports are targeted towards more vulnerable populations. Governments can also encourage public servants to prioritise public transport for commuting.

Policy examples: In response to the crisis in the Middle East, several countries are encouraging users to prioritise public transport. In [Lao PDR](#), the Ministry of Public Works and Transport is studying ways to connect the Bus Rapid Transit system with train stations and airports to improve access. Similarly, the government of [Bangladesh](#) has asked citizens to use public transport instead of private vehicles to conserve fuel. Several governments also implemented public transport measures in response to higher energy prices in 2022, such as reduced or zero-fare public transport schemes. [Luxembourg](#) has had free public transport since 2020 and [Malta](#) became fare free for all residents in 2022. Other countries implemented short-term measures, such as [Germany's 9-euro ticket](#), which gave access to use all local transport and regional trains for a month. New Zealand's government [halved public transport fares](#) in March 2022 as a response to rising oil prices.

4. Alternate private car access to roads in large cities on different days

Description: Private vehicles are allowed into designated zones in large cities on specific days only based on their number plate. Vehicles with odd-numbered plates have access on different weekdays than those with even-numbered plates. This measure reduces traffic congestion, engine idling and fuel-intensive stop-and-go driving. It also reduces local air pollution and improves attractiveness of the city centre for the use of bicycles or walking.

Impact: Preventing half the car stock from circulating in cities for two days a week would save 1% to 5% of national car oil use. Like the previous measures, the impact is stronger on gasoline, except in countries where diesel-powered cars make up a significant share of the car fleet.

How governments can enable this: Governments can designate specific zones with alternating traffic restrictions. Cars can be assigned to certain weekdays or dates based on their number plates. For example, even-numbered plates on some weekdays and odd-numbered plates on the other weekdays. Exceptions can be made for cars with many occupants, as well as taxis. Governments can refrain from granting exemptions to non-essential government fleet vehicles.

Policy examples: In response to the 2026 crisis in the Middle East, the [Korean government](#) is considering putting in place a 5-day or 10-day vehicle rotation system, meaning each vehicle would be prohibited from use for one day every five or ten days. Looking further back, the measure has been used for a long time in many cities globally. During the first oil shock in 1973, the Italian government first introduced car free Sundays and then an odd/even number plate policy on Sundays. Since then, some [large cities](#), such as Beijing and São Paulo, implemented this measure permanently, while temporary schemes during pollution or rush hour peaks were implemented in New Delhi, Jakarta and Manila. In recent years, many countries have had initiatives such as car-free Sundays in cities.

5. Increase car sharing and adopt efficient driving practices

Description: Individual choices on driving styles, car sharing, and temperature settings can influence fuel consumption. People can choose to share a ride to reduce oil demand and save on other costs such as tolls. Carpooling contributes to oil demand reduction by increasing car occupancy and relieving road congestion, thus reducing travel times. Efficient driving practices such as smoother acceleration, tyre pressure monitoring and higher vehicle air conditioning set points can increase fuel savings further.

Impact: Carpooling can reduce oil demand because it allows the same amount of energy to meet a greater share of mobility needs. Reducing car usage in rural areas, for instance, can potentially lower national car oil consumption by up to 4%. Adopting eco-driving measures can double the savings in most regions, while higher air-conditioning set-points mostly affects hot climate countries. Combining all these measures together: carpooling for rural trips, air conditioning measures, and eco-driving could lead to a reduction of car oil demand by around 5% to 8%. The impact is greater on gasoline, except in countries where diesel-powered cars constitute a significant portion of the fleet.

How governments can enable this: Governments can designate dedicated traffic lanes, dedicated parking spots, reduced road tolls for higher occupancy vehicles, and support the [use of ride-sharing apps](#). Information campaigns on eco-driving techniques, and on the impact of air-conditions on fuel consumption can prompt more drivers to change their driving behaviours.

Policy examples: Several countries and cities already promote car sharing and eco-driving to reduce fuel consumption. Carpool lanes have been implemented in various urban areas to incentivise shared travel, such as [Madrid](#), [Houston](#), [Shenzhen](#) and [Los Angeles](#), among others, where exclusive lanes can be used by cars with more than two occupants. In response to the energy crisis in 2022, [France](#) encouraged citizens to adopt more economical driving habits, and accelerated the deployment of eco-driving trainings. The [Japanese government](#) has issued recommendations for eco-driving, including gentle acceleration, reduction of idling and reduced use of car air conditioning. The measures are actively promoted in cooperation programmes with ASEAN countries.

6. Efficient driving for road commercial vehicles and delivery of goods

Description: Road commercial vehicles are major consumers of diesel, an oil product strongly affected by the current crisis. Their fuel efficiency and mode of operation can significantly impact oil use. Measures range from the efficient operation of vehicles, including regular checks of tyre pressure, reduced idling and reduction of braking and accelerating, to operational improvements such as optimisation of vehicle loads and a reduction of empty travel journeys. Digital technologies can facilitate reaching these goals.

Impact: If the information campaigns are successful and there is widespread adoption by drivers, eco-driving practices could reduce national oil use for road freight by up to 4%. This measure in combination with an optimisation of delivery options (i.e. increasing load factors) could reduce their national oil demand by 3% to 5%, mainly reducing diesel demand.

How governments can enable this: Governments can introduce eco-driving techniques as part of the examinations to receive a driving licence. In the short term, they can offer information material to logistics companies or recommend driver scorecards that can set up a competition for most economic driving style within a company. Governments often operate their own vehicle fleets and can introduce training for eco-driving techniques and put special emphasis on vehicle maintenance, such as tyre pressure.

Policy examples: The [UN Economic Commission for Europe Partnership on Eco-Driving](#) has published guidelines for local eco-driving initiatives. Private and public initiatives such as the [AddSecure Eco-Driving Challenge](#) have demonstrated fuel savings potential of eco-driving techniques. [Peru](#) has made regulatory changes to include eco-driving in the training curriculum as a requirement for a driver's license. Under the [Giro Limpio](#) programme, Chile has implemented free efficient driving trainings and certifications for professional drivers.

7. Divert LPG use from transport

Description: Given the current shortage of LPG for cooking in certain regions, governments could support a reduction in LPG used in transport. Around 2% of the global car fleet runs on LPG, with that proportion in some countries, such as Italy and Korea, reaching up to 10%. These vehicles are either retrofitted (converted from gasoline vehicles using LPG kits) or factory-built bi-fuel models capable of running on both gasoline and LPG, and Mono-fuel LPG vehicles are limited in number. Therefore, LPG consumption can be reduced with very limited operational consequences for drivers.

Impact: A temporary shift away from LPG use in road vehicles could divert almost all LPG road consumption in most countries, or 20% to 30% in a few markets where mono-fuel LPG vehicles are present. This could lead to a rise of global gasoline demand of around 2%, with some countries – particularly in Europe, such as in the Balkans, experiencing a noticeable increase in national road gasoline consumption.

How governments can enable this: Most LPG usage is driven by its favourable price relative to gasoline. By adjusting taxation, governments can temporarily encourage drivers to choose the gasoline option instead of LPG, particularly in converted vehicles or bi-fuel ones.

Policy examples: Currently, most countries maintain low excise taxes on LPG compared to gasoline due to lower CO₂ and local air pollutant emissions, and in some cases even subsidise LPG conversions. Historically, there are few, if any, examples of policies that have led to a reverse trend favouring gasoline over LPG. However, under the specific circumstances today, such measures could be considered to influence fuel choice.

Air transport fuels

Jet fuel demand accounts for around 7% of global oil demand. Jet fuel markets look to be particularly vulnerable to an extended loss of Middle East production and exports, given limited flexibility elsewhere to increase output.

8. Avoid air travel where alternative options exist

Description: Travel for work accounts for a large share (between 20% and 40%) of aviation activity. In many cases, travel for work can be temporarily substituted by virtual meetings. A reduction of around [40%](#) of flights taken for work purposes is feasible in the short term, while maintaining productivity.

Impact: Very high voluntary participation to work-related flight reduction campaigns could yield reductions in jet kerosene demand by between 7% and 15%.

How governments can enable this: Governments can launch campaigns to encourage companies to limit air travel for work whenever possible. Governments lead by example by limiting air travel for public officials and encouraging more meetings to take place virtually.

Policy examples: In response to the 2020 crisis in the Middle East, several governments have limited travel for work by public officials. For example, [Thailand](#) has suspended overseas trips for government agencies and state enterprises, while [Egypt](#), [Pakistan](#) and [Viet Nam](#) have all announced measures to limit public official travel.

Cooking fuels

LPG demand accounts for around 10% of global oil demand and is used by many households for cooking. The conflict has caused major disruptions to LPG supply chains. With natural gas processing operations halted in parts of the region and flows through the Strait of Hormuz having come to a standstill, LPG supplies for cooking use have been severely curtailed, both locally and at export destinations. Next to measures to free up LPG capacity from other uses, such as in transport or industry, to prioritise domestic use, there are also actions to directly reduce cooking fuel demand.

9. Where possible, switch to other modern cooking solutions

Description: Constrained LPG supply could have significant implications for households that rely on this fuel for cooking. LPG is the main fuel used for a fundamental service like cooking by 2.3 billion people in Asia. Some households own multiple modern cooking technologies, like LPG or electric stoves, and others could afford those with incentives. Targeted campaigns could help users switch to other modern cooking alternatives and reduce reliance on LPG. This could mitigate the risk of fuel shortages, which could pose significant challenges in households with limited ability to switch to alternative fuels and could also face rapidly rising prices for other cooking fuels, especially in urban areas. In many rural areas, rising fuel prices are already driving some households to revert to charcoal and wood, undermining longer-term objectives to extend universal access to clean cooking. This has implications for air quality and health. Using biomass as a traditional cooking fuel is associated with around 2.5 million premature deaths globally each year.

Impact: In the 20 countries that make up over 90% of LPG use for cooking, between 5% and 15% of households relying on LPG already have access to an alternative modern cooking solution and could be encouraged to prioritise its use. For households that rely exclusively on LPG for cooking, facilitating access to alternative modern cooking solutions, such as electric stoves or electric pans, could further reduce demand, subject to available equipment stocks and grid capacity. For around half of these households, a basic alternative would be less than 5% of monthly income, and targeted incentives can improve the affordability, provided supply chains can accommodate the increased demand.

How governments can enable this: Governments can encourage those households to use their electric devices more when they own it or support greater electric appliances adoption with targeted incentives for lower-income families. Any incentive scheme should prioritise those with limited resources, and consideration should also be given to the availability of appliance stocks and grid capacity.

Policy examples: [Indonesia](#) is accelerating the conversion of LPG to induction stoves to reduce fuel imports and subsidy burdens. In India, the government of [Andhra Pradesh](#), for example, is equipping local community centres with induction stoves, deploying over 44 000 units amid LPG supply concerns.

Oil use in industry

Industry accounts for around 20% of global oil demand. Two-thirds of industrial oil demand is used as feedstock in the chemicals industry. There are options that can bring down oil demand in industry, and some flexibility on which oil products are used as petrochemical feedstocks.

10. Leverage flexibility with petrochemical feedstocks and implement short-term efficiency and maintenance measures

Description: The majority of petrochemical production capacity in Asia and the European Union can technically switch between different oil products – such as LPG, naphtha, ethane or gasoil – as a feedstock without requiring equipment modifications. Prioritising the processing of oil feedstocks that are more available could help release pressure on the others. Meanwhile, industrial oil-consuming facilities can save additional fuel in the short-term through maintenance checks and optimising how equipment is operated. Measures vary by site but typically include shutting down equipment when not in use, reducing temperature and pressure setpoints to only what is necessary, fixing leaks and maintenance issues, and improving scheduling so processes run more efficiently.

Impact: The degree of flexibility in petrochemical production and the level of stocks varies largely across regions. Most of the flexible chemical facilities are concentrated in Asia and Europe. With quick maintenance checks, individual industrial facilities can often reduce overall oil use in their processes by up to 5% in the short-term.

How governments can enable this: Governments can encourage industrial facilities to replace LPG with other oil products to prioritise LPG for essential uses. They can set up incentives to compensate for the change in production mix occurred by the change of oil product feedstock. Governments can also provide guidance, and sector-specific benchmarks to help facilities make quick savings. A walk-through of a facility with operational staff, combined with the use of energy management information systems, is often the first step to identify these opportunities.

Policy examples: There is experience dating back to the 1970s on how to encourage urgent energy savings in industry. [Japan](#) promoted quick energy management, such as cleaning, measuring, and minor repairs, while the United Kingdom recommended operational improvements, maintenance and monitoring. Meanwhile, the United States created [Industrial Assessment Centers](#) to help manufacturers cut back on energy costs through free energy audits. More recently, in 2022, the European Union's [REPowerEU Plan](#) pushed to accelerate the adoption of efficiency measures in industry.

Targeted consumer support to enhance energy affordability

Many governments around the world are reacting quickly to protect consumers from increasing fuel prices. In the days following the conflict in the Middle East, the IEA has tracked announcements from around 40 countries that are deploying or considering deploying emergency measures to shelter consumers from price increases. Immediate government responses have been to implement price caps, fuel subsidies and shifts in taxation, along with price stabilisation mechanisms that can quickly set limits on consumer price increases.

Previous crises, including the Covid-19 pandemic and the 2022 energy crisis, demonstrated that impacts often fall disproportionately on the poorer segments of the population. On top of this general effect, consumers and small businesses in remote and Island territories are often very exposed to increases in oil prices. Even in normal times, [electricity generation](#) on islands can cost [10 times more](#) than on mainland territories where they are often dependent on diesel generators. As a response to this issue, Barbados, for example, has [locked in the price of heavy fuel oil](#) which powers electricity generation, at USD 92 per barrel for the three months, starting from April 2026.

Experience from previous events can guide measures today. Between early 2022 and April 2023, governments had spent around USD 900 billion in direct grants, vouchers, tax reductions and price regulations, often resulting in additional costs to compensate energy companies for operating losses. Blanket measures such as price caps and energy tax reductions were widely used as they are relatively easy to administer and can alleviate pressure quickly. However, they can also represent high costs to government and be challenging to phase-out.

Designing emergency support mechanisms that are temporary and targeted towards consumers that most need assistance can ensure that government support is deployed both quickly and efficiently in times of crisis. Investing in short-term measures to promote energy efficiency and demand restraint can also help to quickly lower energy bills in cost-efficient ways. Some examples of mechanisms that have been used widely follow, with a specific attention to measures that target low-income and vulnerable households.

Supporting consumers by reducing the pressure of high prices

Governments can support low-income households by reducing their energy costs or giving them money to help pay for energy. Unlike universal subsidies which benefit everyone, targeted programmes focus only on vulnerable or eligible groups making assistance more efficient and reducing government spending.

In response to the crisis in the Middle East, the [United Kingdom](#) has announced an allocation of GBP 53 million to support vulnerable heating oil customers and is committed to ensuring help reaches those who need it most. In 2022, learning from the Covid-19 crisis where universal payments led to increased energy consumption, Japan made targeted cash payments to 16 million low-income households to compensate them for rising electricity, gas and fuel costs. The Philippines recently launched a nationwide programme providing a PHP 5 000 cash subsidy (about USD 80) to [public utility vehicle drivers](#) starting with [139 000 tricycle drivers](#) to help them cope with surging fuel prices. During the Covid-19 crisis, Pakistan delivered a [cash transfer](#) to [low-income households](#) including fuel support for low-income earners. In response to the current crisis, [Pakistan](#) is considering putting in place the same programme as a relief package for registered recipients, specifically targeting motorcycle and rickshaw owners who rely on fuel for their daily income.

Additionally, governments can also set a maximum price that energy suppliers can charge consumers for energy. Such caps are intended to protect households and businesses from high energy prices, especially during times of market volatility. While not specifically targeted, price caps can provide immediate relief for lower-income households who spend a higher share of their income on energy and ensure that they can still meet basic consumption needs. However, untargeted price caps can be costly and might reduce incentives for consumers to reduce their long-term energy demand.

Adjusting household energy bills through taxation and tariffs

Governments can play a determining role in how energy related taxes and levies are distributed among utilities, industry and households. These policy choices can have a significant impact on the energy price for end users and can also be leveraged in times of crisis to provide bill relief for households. For example, governments can eliminate or reduce taxes (such as sales tax, VAT, import duties, or excise duties) on energy bills to lower costs for households. Targeting tax reductions on products that use less energy than standard versions is also a lever to reduce household energy bills. Governments can also design tariff bands that determine price thresholds by income brackets, to offer lower prices for those who consume less to ensure that they can meet minimum energy needs.

In response to the current crisis in the Middle East, Austria has announced that it will [return extra tax revenue](#) from higher fuel prices to consumers by cutting the petrol tax, starting with a reduction of 5 euro cents per litre. Meanwhile, Türkiye has introduced a [temporary fuel tax adjustment](#) mechanism that offsets up to 75% of oil-price increases by reducing the Special Consumption Tax, aiming to protect consumers from rising pump prices. In 2022, [Finland](#) increased the tax reduction workers could claim for their commuting costs. This helped target benefits toward

daily commuters. In 2002, Brazil implemented a [social tariff banding programme](#) which offered progressive subsidies for low-income households based on their consumption, starting with a 65% reduction for households consuming less than 30kWh. In 2025, this was reformed to provide 60 million low-income Brazilians a full [subsidy for the first 80 kWh](#) consumed.

Combining these immediate actions with structural measures can help energy security and affordability in the longer term

Reducing oil consumption in the short term can help shield households and businesses from high prices. Combining those immediate actions with longer-term, structural measures to lower oil use can enhance energy security and affordability. Governments have the required tools to make households and businesses more resilient against potential oil price shocks. Key actions include:

- Reinforce the adoption of electric and more efficient vehicles and accelerate the installation of EV charging infrastructure: EVs now account for over 1 in 4 cars sold worldwide. Promoting EVs, hybrids, and other fuel-efficient vehicles – not just cars, but also two-wheelers, buses, and trucks – alongside expanded charging infrastructure can help reduce global reliance on oil. Governments can accelerate adoption through tax incentives, subsidies, low-emission zones, and other supportive policies. Some countries have recently stepped up electrification efforts amid the current crisis: Indonesia is aiming to convert its two-wheeler fleet through targeted programmes, while Lao PDR is investing in EV charging and exploring further measures. Meanwhile, integrating EV incentives into broader industrial strategies can amplify their impact. Brazil's Green Mobility and Innovation Programme illustrates this by combining fuel economy standards with incentives for domestic EV production.
- Raise the ambition of fuel economy standards for road vehicles: While EV sales are growing, most vehicles on the road worldwide still rely on internal combustion engines. Many countries have set fuel economy standards to ensure new vehicles align with fuel efficiency and electrification targets. Today, most new cars sold are covered by such standards. Similarly, improving the fuel efficiency of trucks is critical, especially in fast-growing transport sectors in emerging economies. Notable policy examples include the EU's CO₂ standards for cars and heavy-duty vehicles, Japan's fuel efficiency standards for trucks and buses, and China's fuel consumption limits tied to vehicle weight. Other countries like France have expanded their use of weight-based road taxes with differentiated rates for ICEs and EVs. Complementary measures such as labelling can also have an impact.
- Accelerate the deployment of alternative modern cooking solutions: LPG has provided a key avenue in many countries to replace traditional biomass and kerosene stoves for cooking, but electricity and other energy sources provide alternatives. Governments and organisations can support this transition through a range of measures, such as providing subsidies, offering microfinance for

household purchases, or coordinating bulk procurement programmes to lower costs. For example, Indonesia is supporting households adopt electric cooking equipment by setting ambitious targets, carrying out pilot projects and distributing units to households with reliable electricity connections currently using LPG.

- Accelerate the deployment of energy management systems in industry: Energy management – the proactive and systematic monitoring, analysis, control, and optimisation of energy – has been shown to deliver more than 10% energy savings on average within the first three years of implementation in industrial companies. A growing number of companies are demonstrating even larger savings of 30% or more, with many of the measures at low or no cost. Governments can encourage the adoption of energy management systems in industry by providing incentives, technical support, and recognition programmes for companies implementing standards such as ISO 50001, which help monitor, optimise, and reduce energy use. For example, Japan combined incentives to implement energy management with benchmarking systems. Meanwhile, France provides tailored information, incentives, and support for small and medium-sized companies seeking to implement energy management practices.
- Accelerate the replacement of oil heating systems and industrial boilers with heat pumps: Many countries still rely on oil for their residential space and water heating, and oil products are used for low-temperature heat in industry. Electrifying these end-uses with high efficiency heat pumps, combined with retrofits, can help reduce oil demand. Policy examples include Canada's Oil to Heat Pump Affordability Program, which provides upfront grants to low and median income households to help replace heating oil with heat pumps. In Finland, homeowners can replace their oil heating systems and obtain a grant of up to EUR 4 000 if installing a heat pump. In New England, a region where heating oil is still widely used, the New England Heat Pump Accelerator aims to support the installation of 580 000 units through targeted incentives.
- Increase plastic waste collection, re-use and recycling: Many plastic products are single use, some for essential purposes, such as medical supplies, and others mainly for convenience, like bottles, cutlery, and food containers. Measures to reduce their use have a modest impact on oil demand in the short term but can help pave the way for larger reductions. Existing recycling facilities can be optimised to increase recycling rates, supported by improved waste management infrastructure. Meanwhile, collection and recycling rates can also be gradually increased, alongside improvements in processing yield and material substitution.
- Scale up the supply of sustainable fuels: The availability of sustainable feedstocks remains a constraint on how much biofuel production can expand. Even so, there is scope to increase output by making greater use of waste cooking oil, animal fats, and other non-food sources. Meanwhile, synthetic fuels, such as hydrogen and ammonia, are unlikely to significantly reduce oil use in the near term, but accelerating research, development, and demonstration will be important to help diversify future energy supply. Sustainable fuels can play a role in both transport and industry, particularly in applications that are difficult to electrify, such as aviation, shipping, and high-temperature industrial processes.

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