



International
Energy Agency

Oil Security

Ensuring energy security has been at the centre of the IEA's mission since its creation in 1974, following the oil crisis in 1973. Today, the global oil market remains vulnerable to a wide range of risk factors, including natural disasters, major technical accidents, and geo-political tensions. As oil is expected to remain a major component of global energy demand for the coming decades, particularly for the transportation sector, maintaining the IEA emergency response capability will continue to remain essential.

In accordance with the Agreement on an International Energy Programme (I.E.P.), each IEA country has an obligation to hold emergency oil stocks equivalent to at least 90 days of net oil imports. In case of a severe oil supply disruption, IEA members may decide to release these stocks to the market as part of a collective action.

There are three approaches to guarantee overall stock levels to meet a country's 90 days requirement: industry stocks, government stocks and agency stocks. Several countries use only one category of stocks while most use a combination of the three. Along with other emergency policies, IEA members' stockholding structure is assessed every 5 years as part of a peer-to-peer review process.

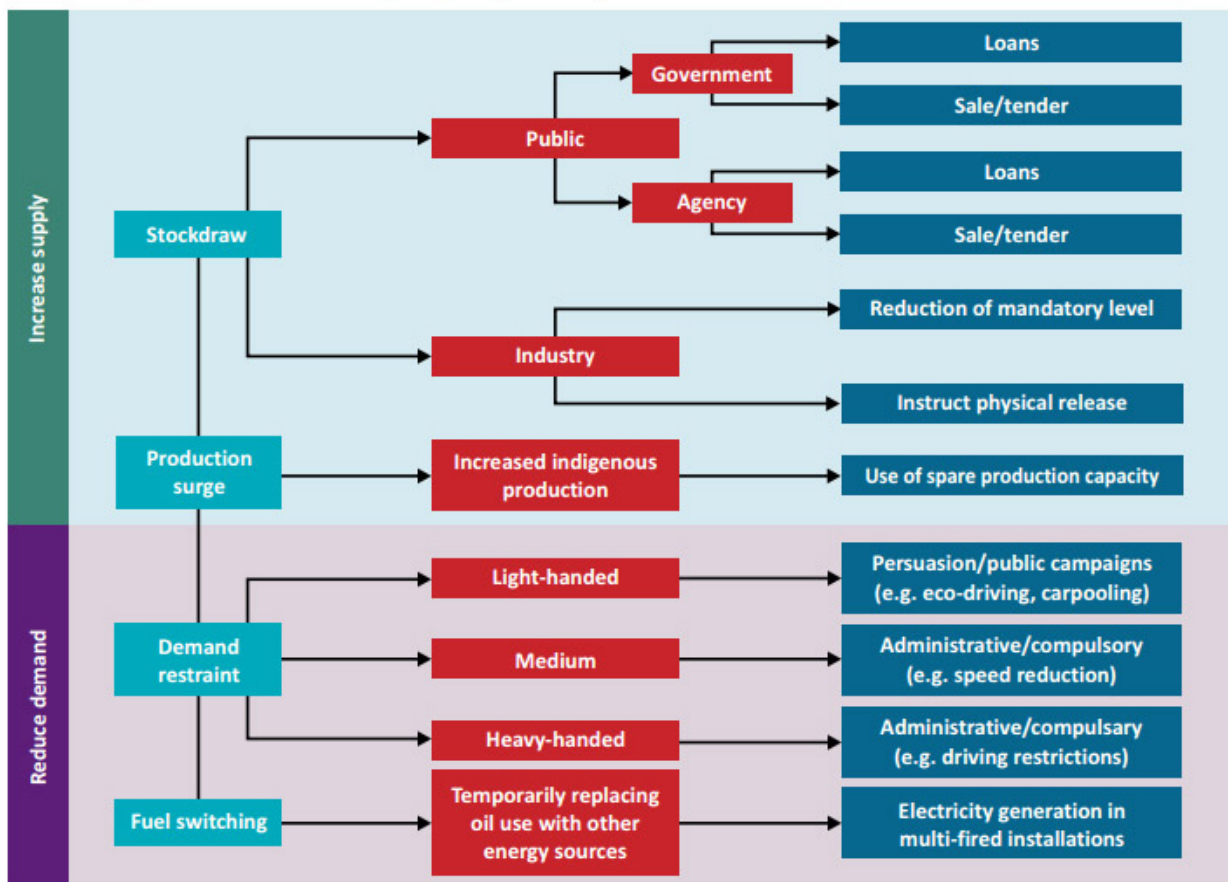
For the IEA members, as well as several Association and Partner countries, the findings of these Emergency Response Reviews have been collected in the publication: "Energy Supply Security: Emergency Response of IEA Countries 2014". In 2018, the IEA updated the study on "Cost and Benefits of Emergency Stockholding" to assess the real value of emergency oil stocks under new market conditions. The estimated costs and benefits covered in this report can give guidance to countries to grasp the essential elements of emergency oil stocks and develop an efficient energy security system.

Frequently Asked Questions on IEA's work on energy security.

OIL STOCKS TABLE

View the IEA member countries' oil stocks (in days of net imports)

EMERGENCY RESPONSE MEASURES



The Agency's collective response system is designed to mitigate the negative economic impacts of sudden oil supply shortages by providing additional oil to the global market. The system focuses on alleviating short-term oil supply disruptions either by increasing supply (e.g. releasing emergency stocks) and/or reducing demand (e.g. implementing demand restraint measures). The IEA emergency response system is not a tool for price intervention or long-term supply management, both of which are more effectively addressed through other measures such as oil import reduction, energy supply diversification, and/or the development of alternative energy technologies.

In addition to the oil stock release, the IEA member countries have other measures available to mitigate the impacts of an oil supply disruption. These include:

- Demand restraint measures range from light-handed (e.g. public information campaigns to promote voluntary actions) to more medium-and heavy-handed (e.g. driving restrictions or fuel rationing). These measures might apply to various sectors; road transportation is commonly targeted due to the high proportion of oil consumption. The study "Saving oil in a hurry 2018" provides a set of actionable recommendations for governments on how to effectively reduce oil demand in the event of an oil supply disruption.
- Fuel switching is the substitution of one form of fuel for another. Natural gas is a possible alternative to oil in the event of an oil disruption, particularly in the power sector
- Surge production is the rapid activation (within 30 days) of spare crude oil production capacity to increase oil supply
- Fuel specifications, such as environmental or quality standards, are temporarily relaxed by governments to increase the flexibility of supply

In the event of an actual or potentially severe oil supply disruption, the IEA Secretariat first assesses the potential market impact of such a disruption and the need for a co-ordinated response. The decision to initiate a collective action is made following an assessment of the disruption and the current market conditions: an estimate of the oil supply loss, the amount of commercial oil stocks available and the spare production capacity available on short notice based on consultation with producer governments. During this decision-making process, the IEA Secretariat would also benefit from the input of industry experts through the Industry Advisory Board (IAB). If the disruption is determined to be sufficiently large so that global energy markets would be significantly affected, an IEA collective action may be recommended.

The consultation to determine the need for IEA collective action and subsequent recommendations is expected to take place within a couple of days. Once the need for an IEA collective action has been agreed, each member country's contribution is proportionate to its share of total oil consumption among IEA member countries.

Since the creation of the IEA, there have been three collective actions: in the build up to the Gulf War in 1991; after Hurricanes Katrina and Rita damaged offshore oil rigs, pipelines and oil refineries in the Gulf of Mexico in 2005; and in response to the prolonged disruption of oil supply caused by the Libyan Civil War in 2011.

Our work on energy security



Oil Security

One of the IEA's core activities is ensuring the security of oil supplies by setting oil stockholding requirements for member countries and coordinating the international response to supply shocks



Natural Gas Security

Gas security challenges are evolving. The current period of gas oversupply – driven by overcapacity in the LNG market – should not overshadow the critical importance of global gas security



Electricity Security

In May 2015, the Group of Seven (G7) Energy Ministers asked the IEA to help determine the best means of improving electricity security, including through increasing system flexibility



Member and Key Partner Emergency Policies

Since its founding in 1974, oil supply security has been a core mission of the International Energy Agency



Resilience

The energy sector has to withstand demand or supply shocks in global energy markets, natural disasters, explosions or cyberattacks and other extreme events



Emergency Response

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