

Best Practices Principles for the Establishment and Management of Strategic Oil Stocks

Although APEC encompasses net energy exporters and importers, APEC's overall energy demand and supply structure is vulnerable and will become more so as energy demand increases. Rapidly increasing regional oil demand and dependence on Middle East supply is a key concern. Worldwide, many consumer nations have insured themselves against the adverse impact of oil disruptions by building strategic oil reserves, either through government programs or partnership with industry. Consumer nations have also agreed on collective emergency measures that can be implemented in the event of supply emergency. For interested member economies, these best practice principles provide a guide for important insurance against the adverse impacts of future oil disruptions.

The APEC Energy Security Initiative (ESI) encourages member economies to develop emergency preparedness plans, to consider strategic oil stocks and to share information on other responses to oil supply disruptions, including through a real time emergency information sharing system, in ways that are practical in a policy context and politically acceptable. Under the ESI, the Action Plan to Enhance Energy Security, endorsed by APEC Leaders in October 2003, requires recommendations to be made to APEC Energy Ministers for best practice principles for managing strategic oil stocks and a program to provide capacity building assistance on technical and policy issues.

The following best practices for strategic oil stocks were developed by an ad hoc group of the Energy Working Group. The best practice principles are based upon the experiences of member economies that have strategic oil stocks and are recommended to other economies that are currently or may in the future consider establishing strategic oil stocks. A basic assumption, in line with the ESI, is that strategic oil stocks are an option for economies to consider. While noting the benefits of strategic oil stocks, member economies recognize that individual economies determine whether they will establish such stocks based on their particular needs and circumstances.

For member economies requiring advice on the implementation of the best practice principles, capacity-building assistance can be requested from the Energy Working Group and made available through the Implementation Facilitation Assistance Team (IFAT) mechanism endorsed by APEC Energy Ministers for all energy initiatives.

RATIONALE FOR STRATEGIC OIL STOCKS

- Security of oil supply is a major concern of many member economies.
- Although some member economies are oil exporters, the majority of the larger economies are oil importers and the APEC region as a whole is and will remain a net oil importer. Also, a number of oil producing economies have recently become oil importers or will be importing oil from outside the region in the near future. As a result, by 2010, APEC will be importing 60 percent of its oil from outside sources. Moreover, East Asia as a whole will import over 75 percent while East Asia excluding China will continue to import close to 100 percent of oil supply. Of particular concern to East Asia is that most of the additional

oil required to meet rising demand is likely to be imported from the Middle East. The long distance over which supplies from the Middle East must be transported increase the potential for supply disruptions.

- Oil market stability is a common concern of both oil exporters and oil importers.
- The risk of oil supply disruptions, intrinsic to oil supply systems and documented historically, is a major energy and economic policy concern.
- A supply disruption can result in sharp increases in oil prices that inflict serious damage on member economies and the global economy. By building and maintaining strategic oil stocks, an economy (and the region) can protect itself from the crippling economic damage that an oil supply interruption can inflict.
- Among the energy policy options open to governments to reduce the risks of oil supply disruptions, measures that guarantee oil supply in an emergency, such as stockpiling, best limit economic damages, especially in the short run.
- Among the measures that could be used to respond to oil supply disruptions, draw from oil stockpiles by oil importing countries can be a very effective means of restoring calm to the oil markets and minimizing the economic impact associated with diminished supplies and resultant high oil prices.
- The economic and social benefits of strategic oil stocks exceed the cost of building and maintaining stocks, especially for large economies or groups of economies.
- Strategic oil stocks can be an economy's first line of defense against a severe energy disruption.
- Strategic oil stocks are capable of rapid release and an immediate dampening of the negative effects of a supply disruption.
- Strategic oil stocks have a deterrent value and are a good investment in overall security.
- Strategic oil stocks can be compatible with market principles: the externalities of oil security can be internalized in oil prices.
- APEC has benefited from the policy of stockpiling emergency oil among the countries of the International Energy Agency and their release of stocks during oil supply interruptions in coordinated way because of the effect on the world oil market. By expanding emergency oil stocks, member economies would strengthen regional and global oil security and benefit from their stabilizing economic effect during a supply disruption.
- Strategic oil stocks have minimal environmental impacts and risks and can obtain International Standards Organization (ISO) certification.
- While noting the benefits of strategic oil stocks, member economies recognize that individual economies determine whether they will establish such stocks based on their particular needs and circumstances.

BEST PRACTICES PRINCIPLES

Control over Strategic Oil Stocks:

1. The main advantage of government-owned and controlled stocks, as compared to those privately owned but controlled by government, is that they are stored separately from private commercial stocks and the procedures for releasing them are more transparent and have more impact on the oil market.
2. It is more efficient for governments to maintain the degree of operational readiness required. Governments are better able to establish formal response plans and procedures, establish sales processes or drawdown plans, and administer periodic drawdown training and exercises.
3. Governments can manage storage facilities efficiently, conduct periodic inspections and certification of storage containers, test systems and equipment availability and administer system redundancy and critical spares programs.
4. Governments are best positioned to release stocks in large amounts rapidly and can best coordinate internationally on stock release.
5. Governments can ensure that stocks are used only for emergencies and not to manipulate prices or the market.
6. Governments can administer comprehensive petroleum quality assurance programs, including managing and controlling sludge, maintaining crude assays, and conducting periodic sampling and testing.

The Composition of Oil Stocks:

7. Holding crude oil in locations with ready access to transportation and refining is cost effective and flexible.
8. Crude oil, compared to refined products, is cheaper to acquire, store and transport. Crude oil essentially has no storage shelf life compared to refined products and provides flexibility in responding to fluctuations in refined product market needs.
9. Refined products are expensive to maintain, can require rotation, and are subject to changes in specifications mandated by environmental legislation.

The Physical Location of Oil Stocks:

10. Each economy should seek to employ the storage method that provides the most economical storage solution for its situation. This will depend in large part on a combination of geology and the transportation, refining and distribution infrastructure.
11. Underground salt storage has the lowest development and operations cost, offers maximum safety and security and has low environmental impacts and risks.
12. Close proximity to refining centers provides rapid access to stocks in an emergency.
13. Marine distribution can provide maximum flexibility in responding to a variety of potential crises.

14. Economies of scale apply in the construction and operation of storage facilities. There is an advantage to large, centralized storage facilities (which may encourage smaller economies to cut their costs by considering joint stocks with other economies).

Use of Strategic Oil Stocks:

15. Strategic oil reserves should be built and used for the purposes of mitigating the adverse effects of an oil supply disruption and in a manner that complements the market's own response.
16. Governments should not use reserves for price management purposes, absent an oil supply emergency.

Operational Principles for Strategic Oil Stocks:

17. Operational readiness is very important. Inventories lose their effectiveness if the mechanical systems are not ready to respond. Systems should be built with redundancy, flexibility, and made easy to repair. Procedures should be well documented and exercises run regularly.
18. Rapid drawdown capability is important. Most disruptions will be less than six months, but may be intense. Being able to draw down and distribute the inventory quickly is critical.

International Cooperation:

19. Cooperation and communication among economies, including oil producers and importers, is important during emergency responses, including stockdraws.
20. Coordination helps to dispel the uncertainty prevalent during an oil emergency. Action by a group is stronger, more credible and more effective.
21. Strategic petroleum reserves may be jointly held by several economies in order to reduce costs and to take advantage of economies of scale.
22. Temporary lease of facilities in other economies may be a way to reduce costs.
23. Joint stocks could facilitate the coordination of stockdraws as a response to supply disruptions.