



Financing Strategic Stocks

Financial Instruments to Reduce the Costs of Holding/Building Strategic Stocks : An Overview and IEA Perspective



Kristine Ann Kuolt
Deputy Head
Emergency Planning and Preparations Division
International Energy Agency



Petrostocks 2007: New Perspectives
29-30 January 2007

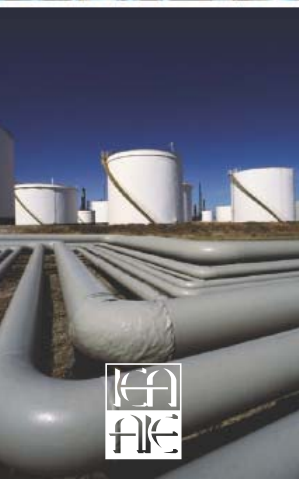


Copyright IEA



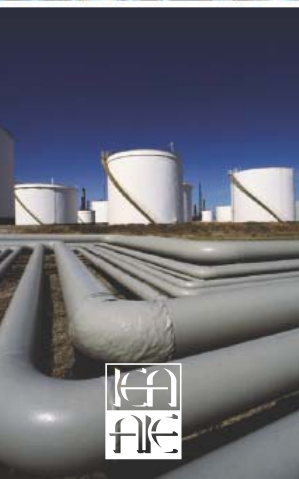
Using Financial Instruments to Reduce the Costs of Building/Holding Stocks

- *The IEA Treaty requires IEA net importing countries to hold oil stocks equivalent of at least 90 days of net imports of the previous calendar year on a continuous basis.*
- There may be some instances where the use of financial instruments may be used to manage risks, or perhaps even to reduce some stockholding costs
- But this must not interfere with stock holding obligations
- In a supply disruption physical strategic stocks are needed
- Financial compensation won't fill gas tanks or heat homes...

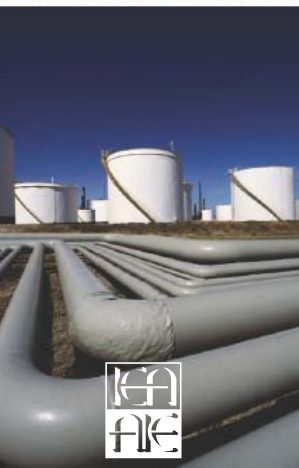


Contents

- **Strategic Stockholding in IEA countries**
- **IEA/EMC Survey – Initial Findings**
- **Conclusions: C.A.D.**



Summary of IEA And EU Stockholding Obligations



	IEA	EU
Obligation	<ul style="list-style-type: none"> •90 days Net Imports •Net Oil Exporters do not have an emergency reserve commitment 	<ul style="list-style-type: none"> • 90 days Internal consumption •Internal consumption can be reduced up to a max of 25% for indigenous production
Special Clauses	<ul style="list-style-type: none"> •Naphtha excluded •International Marine bunkers excluded 	<ul style="list-style-type: none"> •Bunker supplies for sea-going vessels are not included in internal consumption
Net Imports/Consump.	<ul style="list-style-type: none"> •Net Imports are defined as: <ul style="list-style-type: none"> - Crude, NGL and Feedstock imports-exports -stock changes - Total Product imports -exports -bunkers - stock change (adjusted for naphtha flows) 	<ul style="list-style-type: none"> •Internal Consumption includes the following product categories: <ol style="list-style-type: none"> 1. Motor spirit and aviation fuel, 2 Gasoil, diesel oil, kerosene and kerosene type jet fuel 3. Fuel oils

Stockholding Systems by IEA Member Country

■ Only Company Stocks:

Australia, Belgium, Greece, Italy, Luxembourg, New Zealand, Sweden, Switzerland and Turkey
(Net exporters: Canada, Norway and the UK)

■ Company and Government Stocks:

Japan, Korea, Czech Republic, Portugal, and the United States

■ Company and Agency Stocks:

Austria, Finland, France, Hungary, Germany, Ireland, the Netherlands and Spain
(Net exporter: Denmark)





Financing Policy – Initial Findings of IEA/EMC Survey



While most member governments with central government-controlled stockpiles or centralized stock-holding agencies do not resort to sophisticated financial instruments -

- Hungary has in the past used procedures such as hedging in the process of building its strategic stockpile, also uses financial mechanisms for stock turnover, while the authorities have indicated that “time-swaps” are used for stocks above 90 days
- South Korea, which has used “time-swaps”
- Czech Republic, where “time-swaps” are used for refreshment of strategic stocks
- Finland, where financial mechanisms have been used for necessary quality changes of oil in big volumes (in such cases, the 90 days’ minimum is not risked);
- Netherlands, where “time-swaps” are used for refreshment of strategic stocks, but only when actual physical stocks have been built first above required levels
- Slovakia, where “time-swaps” are used for companies for stocks turnover on behalf of the state stock-piling organisation ASMR (using the system “price for price”, which means the same price for stocks removed from the reserve and for stocks returned to the reserve in the later period)
- the USA, where “time-swaps” have been used for temporary SPR stocks release.

We believe these are not the only cases...

Costs of Holding Oil Stocks

- The “sunk” costs: storage tanks, pipelines, pumps and any discharge/loading terminal or equipment if the facilities, creating and/or added capacity.
- The cost of capital tied up in the oil stocks.
- The cost of compliance with local or national environmental regulations.
- Other overheads, such as wages and salaries, costs for particular grades of oil, and local and/or national taxes.
- Any incentives, fees or tax allowances relating to the strategic stocks.



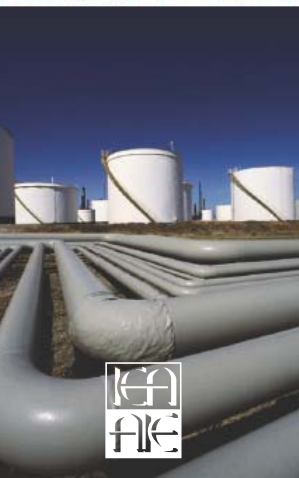
Hedging

- Strategic stocks could be increased by using the futures market to lock-in the price to be paid for a certain volume of stock to be delivered at or over a certain period can be described as hedging the cost of building strategic stocks.
- The same principles can be used for building oil products as well as crude oil stocks.
- The two main futures exchanges are the New York Mercantile Exchange where light sweet crude (WTI) futures can be traded and the InterContinental Exchange (ICE) where IPE Brent futures can be traded.
- Contracts are available for delivery of crude oil up to 10 years forward, although there is less liquidity (i.e. less transactions are completed) further out.
- Other exchanges are available with futures contracts for different crudes but they have not so far proved as successful as the two main exchanges. Heating oil, gasoline, natural gas and other oil products also have futures contracts available.

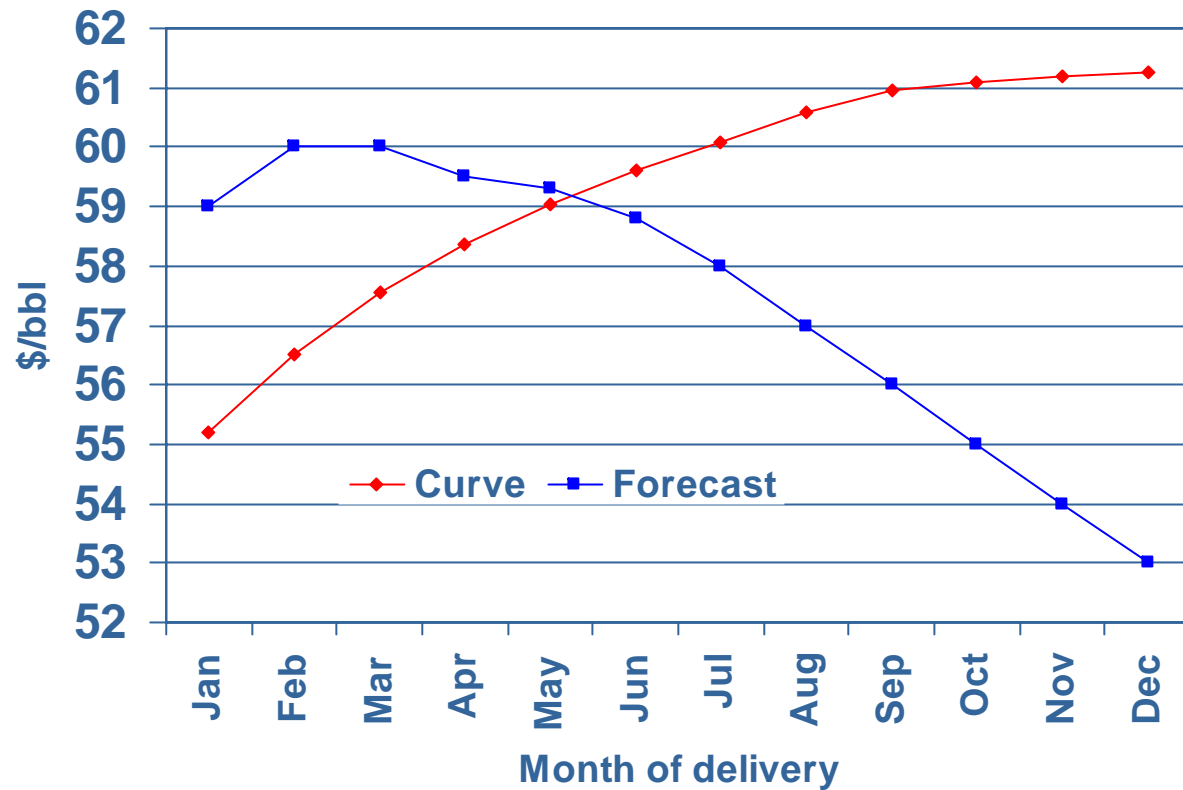


Hedging – Disadvantages

- Unlikely you would build your strategic stocks using Brent or WTI crude - so therefore there will be a price differential between the crude you are buying and the hedging benchmark crude
- Unlikely to have your strategic stocks housed at Cushing Oklahoma or Sullom Voe in the North Sea, so there will be a cost associated with alternative delivery arrangements. Similar issues arise with products. These factors are known as the basis risk and cannot be hedged on futures markets.
- A more precise hedge can be achieved with Over the Counter forward agreements, and may be more attractive. The main issue here is the transference of risk from an exchange/clearing house to a specific counterparty.
- Counterparty risk has the potential to be a significant factor and has to be fully understood before entering into such agreements or more sophisticated arrangements
- Further, as with any large monetary transaction it is important that whoever is making the transaction is fully aware of the risks and supervisory arrangements are put in place to prevent errant trading decisions or being encumbered with excessive or unforeseen risks.
- In this light it has to be considered whether the additional costs/workload are of value, and whether the transactions are better handled by a third party



Hedging the cost of building stocks

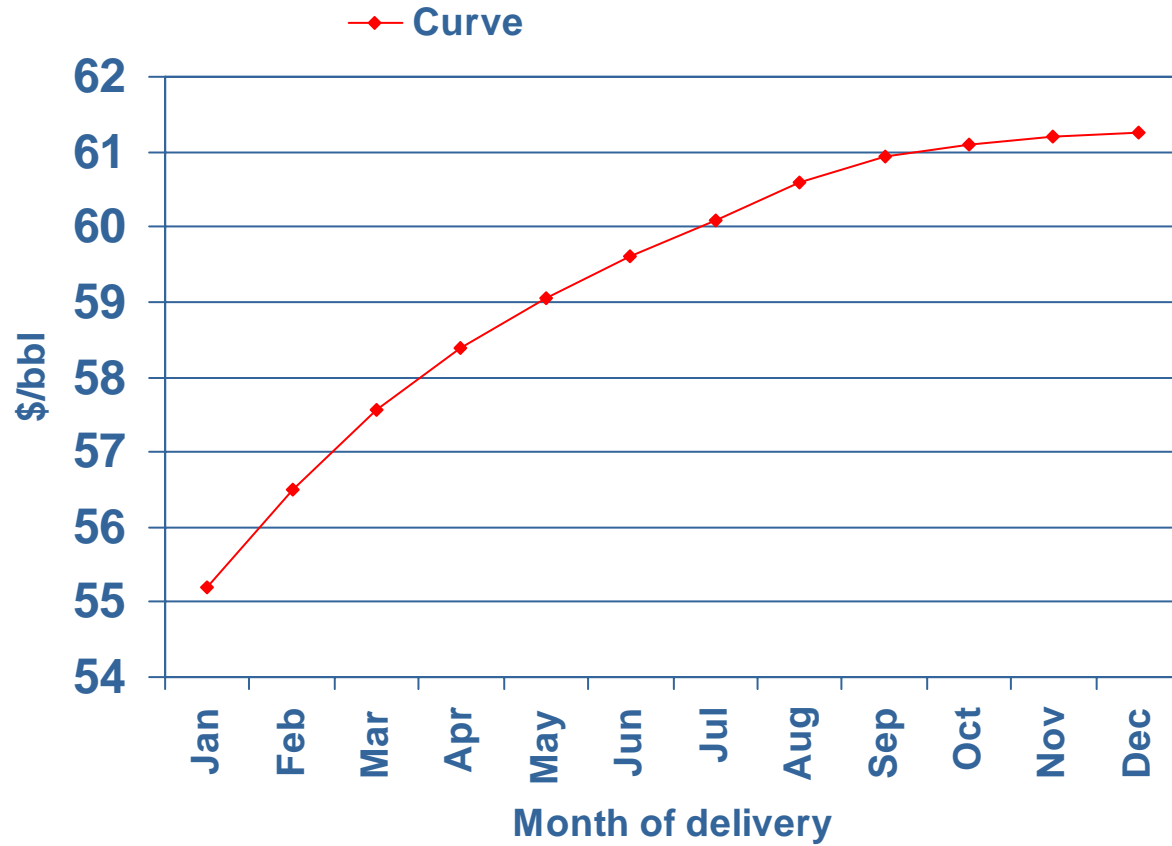
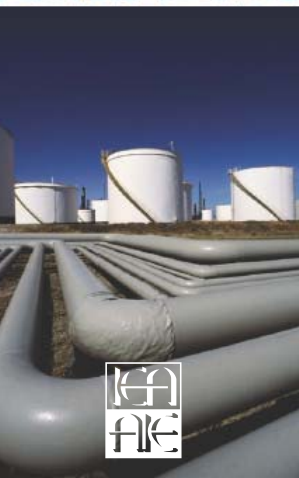


LE1

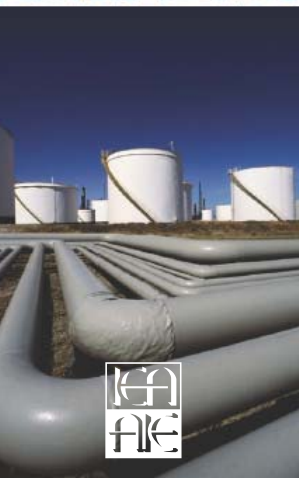
No need for forecast - better to have seasonality of product spreads

Lawrence Eagles, 1/26/2007

WTI crude oil forward curve and US EIA forecast



Returns from tank storage



- There could be instances where active stock management could enhance returns to member governments
 - Spare tank capacity,
 - Stocks in excess of 90 days
 - Rotation
 - Change in ratio of crude/product stocks
- But in all instances there is a management cost, and the risk that the division between strategic stocks and commercial use becomes blurred

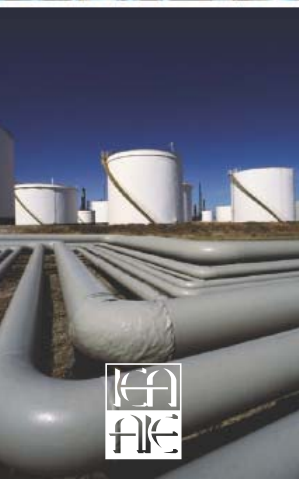
A Cautionary Tale...

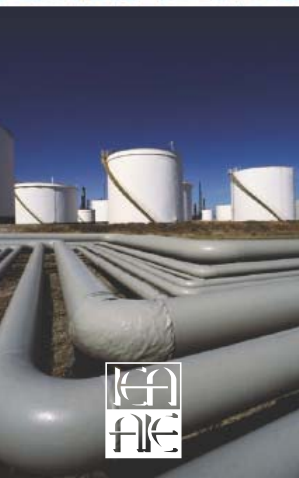
- Various schemes exist to try to either unlock the capital tied up in strategic stocks or to provide a return.
- Like all deals they sound very attractive, but remember they are not being offered as a charitable service – they are there to make the lender a profit (does not mean they are not worth while)
- Need to understand:
 - Risks - market and counterparty
 - How a the offering institution is making a profit - if not clear, then risks are not fully understood
 - Whether the deal acts against IEA requirements in terms of stock holding and management



Conclusions:

- *The IEA and EU countries have an obligation to hold strategic stocks on a continuous basis.*
 - However, there is some scope for using financial instruments
 - In a supply disruption only physical oil will fill your gas tanks and heat homes.
 - C.A.D. = Credibility, Accountability, Deliverability
- Physical strategic stocks are required and necessary for security of supply.





THANK YOU!

