Assessing oil markets during oil supply disruptions

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IEA Training Week
Paris, 9 April 2013
Emergency response – IEA *raison d’être*

- Emergency response to oil supply disruptions a core IEA mission
- IEA has a mandate to coordinate release of strategic oil stocks in case of global oil supply disruption
  - *Respond promptly... to those oil supply disruptions which appear capable of causing severe economic harm*
- IEA coordinated release happened only three times
  - 1991 – Iraqi invasion of Kuwait
  - 2005 – Hurricanes Katrina & Rita
  - 2011 – Libya Collective Action
  
  *But countries have used their emergency stocks for domestic crises*
- IEA monitors the oil market on a daily basis
Major World Oil Supply Disruptions

<table>
<thead>
<tr>
<th>Date Range</th>
<th>Event Description</th>
<th>Gross Peak Supply Loss (mb/d)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Feb - Oct 2011</td>
<td>Libyan Civil War</td>
<td>1.5</td>
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<tr>
<td>Aug - Sep 2005</td>
<td>Hurricanes Katrina/Rita</td>
<td>1.5</td>
</tr>
<tr>
<td>Mar - Dec 2003</td>
<td>War in Iraq</td>
<td>2.3</td>
</tr>
<tr>
<td>Dec 2002 - Mar 2003</td>
<td>Venezuelan Strike</td>
<td>2.6</td>
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<tr>
<td>Jun - Jul 2001</td>
<td>Iraqi Oil Export Suspension</td>
<td>2.1</td>
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<tr>
<td>Aug 1990 - Jan 1991</td>
<td>Iraqi Invasion of Kuwait</td>
<td>4.3</td>
</tr>
<tr>
<td>Oct 1980 - Jan 1981</td>
<td>Outbreak of Iran-Iraq War</td>
<td>4.1</td>
</tr>
<tr>
<td>Nov 1978 - Apr 1979</td>
<td>Iranian Revolution</td>
<td>5.6</td>
</tr>
<tr>
<td>Oct 1973 - Mar 1974</td>
<td>Arab-Israeli War and Arab Oil Embargo</td>
<td>4.3</td>
</tr>
<tr>
<td>Jun - Aug 1967</td>
<td>Six Day War</td>
<td>2.0</td>
</tr>
<tr>
<td>Nov 1956 - Mar 1957</td>
<td>Suez Crisis</td>
<td>2.0</td>
</tr>
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Every supply disruption is different

- Geopolitics
  - Wars
  - Civil unrest
  - Sanctions

- Weather-related
  - Hurricanes
  - Flooding
  - Cyclones

- Logistics
  - Pipeline disruptions
  - Refining bottlenecks

- Operational
  - Oil spills
  - Sabotage
  - Strike actions
Geopolitical & domestic issues affect both energy producing and consuming countries. Supply disruptions (or demand spikes) might require IEA response.
Emergency response: Key considerations

- A significant supply disruption could generate a severe economic cost
  - The market will always balance supply and demand, given time and freedom of price movement
  - But...will the disruption cause severe economic harm?

- What is the market context of the disruption?
  - Can the market cope with the disruption using resources available?

- If action is needed, speed & unity of response are key factors
  - A decision will likely need to be made before all necessary information is available – as tomorrow’s exercise may demonstrate
Emergency response isn’t just about prices

IEA coordinated action is about providing liquidity to a market with temporary bottlenecks, not about price management.
Release of strategic stocks – a last resort

- Strategic stocks are a finite source of supply
- Release in times of high prices might temporarily reduce prices but...unless causes of higher prices are short-lived
  - emergency reserves reduced, return of high prices
  - expensive replenishment in high price market, or risk facing real supply disruption without emergency stocks
  - have to consider the global nature of the oil market
- Using stocks for price management is ineffective
  - distorts market signals
  - reduces cover for genuine emergencies
Monitoring the market

- Need to consider all prevailing market factors:

- Trade/Logistics
- Supply
- Demand Outlook
- Refining Capacity
- OPEC spare capacity
- Stocks OECD/Non-OECD

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How do we know where supply and demand are today?

- Prices provide the most accurate guide to market conditions - but markets are not always efficient
  - Overshoots – herd mentality
  - Very short-term focus
  - Limited knowledge

- Statistics are, by definition, late and subject to revision
  - Trade-off between timeliness and accuracy

- Statistical focus can vary according to market conditions
  - Switch from stocks to demand from crude to gasoline according to the season
Making the assessment

What is the full extent of the outage?
- Will global supply be affected?
- How long will supply be off line?
- Are crude, products or both affected?
- Will there be a direct impact on consumption?

Will spare capacity act as an offset?
- OPEC dialogue very important
- Does crude quality match lost supplies?
Making the assessment (cont.)

- Can consumer country stocks act as a buffer?
  - What about stocks outside of IEA member countries?

- What will be the market impact of intervention?

- Is a regional response necessary?
  - Global market - outages rarely affect only one region
Similar disruptions in 2005 and 2008 can call for different responses

- **Similarities:**
  - volume loss, duration

- **Different market situation in 2008:**
  - falling demand
  - higher stocks
  - higher spare OPEC capacity
  - plenty idle refining capacity elsewhere
  - falling prices

- **Decision:**
  - not to make coordinated release

- But market monitoring & impact assessment were just as intense as in 2005
Closing remarks

- Decision will always have to be made amid uncertainty

- Only act if necessary
  - not just for price
  - examine alternatives to strategic stock release
  - try not to unnecessarily disturb market mechanisms

- Then act quickly
  - Takes time to release stocks
  - But market response instantaneous
    - To both the outage and emergency release

- Coordinated action more effective than unilateral response

- Communication (with oil market, general public) is crucial