

A Look at the IEA 2011 Release of Strategic Oil Reserves

Devin Glick

On June 23, 2011, the International Energy Agency (IEA) coordinated the release of 60 million barrels of emergency stocks in response to the disruption of oil production in Libya due to civil unrest. This announcement elicited a mixed reaction from the public and from the market. Some politicians in the United States called the move a political decision by the President to satisfy voters, private oil companies did not like the interference, and some OPEC countries were upset and called the release unnecessary.

The reason why there was a strong reaction was because the IEA had never coordinated a release in this manner before. It was only the third time there had ever been a release, after the First Gulf War in 1991 and for Hurricane Katrina and Rita in 2005. The circumstance and decision for the June 23 drawdown was more flexible and may signal a change in the way strategic petroleum stocks are used.

Reasons Behind the 2011 Drawdown

While the primary reason for the IEA's action was the crisis in Libya, this was not the only impetus. There were multiple factors in play, including the negative outcome of the most recent OPEC meeting, the expected seasonal increase in demand, and the increased refining capacity for the summer after scheduled closures for maintenance.

The political turmoil and violence in Libya halted nearly all oil production in the

This paper examines the motivations and the potential consequences of the International Energy Agency's coordinated action to release petroleum stocks on June 23, 2011.

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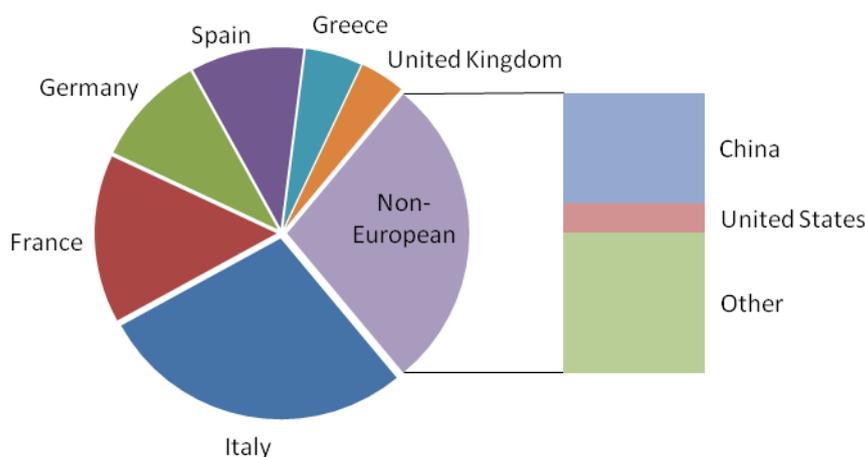
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country. After hovering above 1.5 million barrels per day in 2009 and 2010, production in Libya declined to 169,000 barrels per day in May 2011.¹ This total loss of over 1.3 million barrels per day added up to a loss of an estimated 132 million barrels of light sweet crude from the market by the end of May.² The IEA predicted that Libya would not be able to resume production before the end of the year and thus agreed to compensate for the missing barrels of oil with oil from strategic stockpiles.

Oil exports from Libya are mostly to Europe, which has had to look to other sources to find a replacement. Between January and November of 2010, 28% of Libyan oil was exported to Italy, 15% to France, 10% to Germany and Spain each, 5% to Greece, and 4% to the United Kingdom. Libya also exported 11% of its oil to China, 3% to the United States, and the final 14% to various countries.³ Although Libyan oil is mostly exported to Europe, oil markets are internationally connected and a lack of supply to one region is felt across the globe in prices and spreads between crude streams. As Europe has to look elsewhere for replacement crudes this puts the stress of increased demand on global supply.

Libyan Oil Export Destination, 2010



The refusal of the meeting of the Organization of Petroleum Exporting Countries (OPEC) on June 8 to increase quotas on production provided reason for a more intense look at a drawdown. Saudi Arabia wanted to increase production as high prices were damaging the world economy. On the other side opposing any increase were Iran, Venezuela, Ecuador, and Algeria (the traditional “price hawks”) hoping to sustain higher domestic oil revenue with high oil prices by limiting oil output. This deadlock resulted in no changes to the production quotas and a spike in crude prices.⁴ Before the results of the meeting, there could still be some hope that OPEC would increase production to make up for the loss of Libyan oil, but the option was taken off the table and increasingly

nervous consumers had to look elsewhere.

After the failed meeting, Saudi Arabia decided to unilaterally increase its production levels to 10 million barrels a day, from 9.3 million barrels. Kuwait and the United Arab Emirates have also agreed to increase production in an effort to calm the energy markets.⁵ In IEA's Oil Market Report for July 13, 2011, OPEC supply in June increased by 850 thousand barrels per day to 30.03 million barrels per day, due to a sharp rise from Saudi Arabia.⁶ This is still less than the IEA's 31.3 million barrels per day "call on OPEC," which is the amount of oil that IEA predicts OPEC needs to produce to adequately meet world demand. In addition, these increases take time to implement and get to market.⁷ Some of the increased production in the Gulf region may never leave because these countries face increased domestic consumption of oil during the summer months. Regardless of commitments by Saudi Arabia and other states to increase production, the uptake of additional oil exports by the market is unsure.

The timing of IEA's decision was in part driven by seasonal changes in the market. Demand for petroleum products is generally in a lull during the spring and then picks up for the summer driving season. The unrest in Libya did not cause as much of a stir in the market as it might have because it occurred during a period of lower demand for crude. In addition, scheduled maintenance for oil refineries more often occurs during the spring. With oil refineries coming back on line and an expected seasonal increase in demand approaching, there is less room for supply disruptions or tensions.

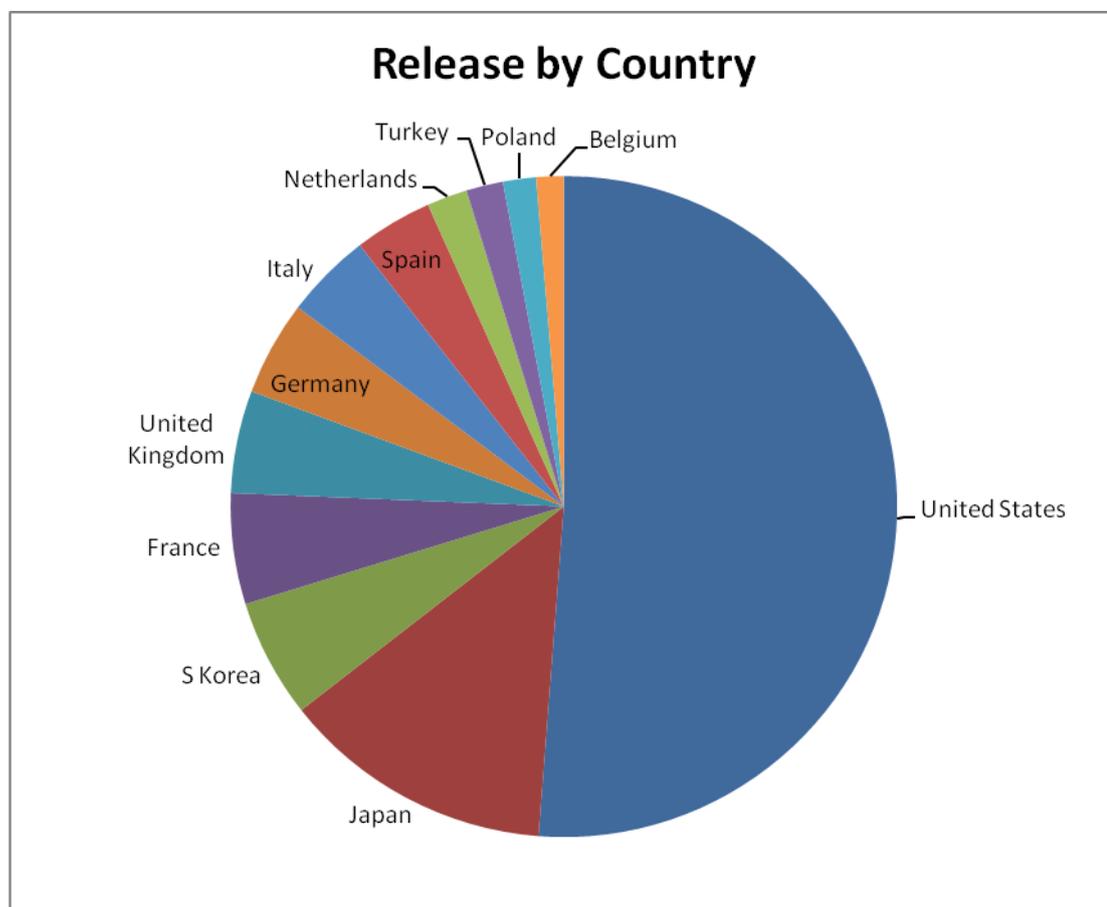
The type of oil that was missing also made the oil market situation more difficult. Libyan oil, which is light and sweet, is the type that is preferred by most refineries for transportation fuels.⁸ The real supply shortage is a shortage of light, sweet crude. Not all European refineries can adequately process heavy sour crude from the Middle East to replace Libyan oil, and therefore the refinery utilization rate in Europe has dropped from over 85% in December 2010 to under 80% by April 2011.⁹ Even if more heavy, sour crude from Saudi Arabia was made available, European refineries have a harder time processing it.

Details of the Release

With the loss of Libya's light, sweet crude, a lack of production increases from OPEC, and an expected increase in demand, Ambassador Richard Jones, the Deputy Executive Director of the IEA told reporters that the market was facing a possible shortfall of 1.8 million barrels per day for the remainder of June and 1.7 million barrels per day for the next quarter.¹⁰ The IEA had been monitoring the

Libyan situation since February when uprisings broke out, but more serious talks about a collective action did not begin until after the OPEC meeting. All discussion was kept confidential to avoid any unintended effects in the oil market. Once a decision was reached the IEA gave all member countries 48 hours to respond with the agreement to the emergency release before the announcement was made publicly.¹¹

Executive Director of the IEA, Nabuo Tanaka, announced on June 23, 2011, that member countries agreed to release 60 million barrels of oil. In the original proposal, half of the release would come from the United States' Strategic Petroleum Reserve (SPR) and the rest divided proportionally among the IEA countries that individually consume more than 1% of final oil consumption. All of America's contribution is crude oil (in the end 30,640 barrels of crude), Japan and Korea will provide an additional 11,382 barrels, split between crude and products. The contribution from European nations will mostly be in the form of refined product, with 14,258 barrels of product and another 3,553 barrels of crude.¹² Even though the stocks will be released in these countries, they are basically available to the international oil market and will be directed by the market to where supplies are needed. The United States is only releasing light, sweet crude from the SPR and this will relieve some of its demand for light sweet crude so that similar crudes from Nigeria and Algeria can be redirected to Europe to make up for the lost Libyan oil to Europe.¹³



The decision was made to “bridge the gap” to cover the expected supply and demand imbalance.¹⁴ After thirty days, the IEA reassessed the situation and determined another drawdown was not immediately necessary. In that time, the stocks from the initial release were still entering the market and thus another release was not necessary, but the door was left open for a future stock release.¹⁵

Unprecedented Decision

This emergency release does not reflect a fundamental change in the underlying philosophy of the IEA, yet it is an unprecedented use of the emergency stocks. According to the “IEA Response System for Oil Supply Emergencies” in 2011, “IEA collective response actions are designed to mitigate the negative impacts of sudden oil supply shortages by making additional oil available to the global market.”¹⁶ This release was designed to mitigate the negative impacts of the oil supply shortage caused by the Libyan oil crisis. What makes this release special is that it was not driven by a sudden oil supply shortage and it was implemented in a flexible manner. The Libyan oil crisis is a slow-burning crisis; it took a few months before the IEA took action because it took a few months before the situation became a real problem.

Another flexible aspect of this release of stocks is the differentiated participation by IEA members. Less than half of IEA countries made their own strategic stocks available even though all 28 members had to agree to the action. During previous releases, all member countries participated in releasing a portion of their stocks. During this release, it was mostly the countries with higher consumption and a more strategic connection to the oil market that agreed to release strategic stocks. This flexibility in limiting the drawdown to a select group of nations gives the IEA more responsiveness as not all IEA countries have to be willing to withdraw stocks. This is the first time the market saw this kind of flexibility deployed by the IEA, but it bodes well for the future as the kinds of energy supply crises we are likely to see in the future will not often be the classic supply losses of the past. Rather, regional perturbations or even disruptions in gas supply or the power sector can be a source of tension in oil market in future scenarios. Learning how to respond flexibly is a good idea for the IEA to prepare for the unconventional disruptions of the future.

The last release of emergency stocks was in 2005 for Hurricanes Katrina and Rita. In this instance, the IEA responded to a sudden event that created a lack of adequate supply. Hurricane Katrina caused all of Gulf of Mexico oil production (about 25% of U.S. oil production) to be shut in. Import terminals

were closed and damage to pipelines and refineries rendered them inoperable.¹⁷ This was an unexpected weather event that shut in a significant portion of supply and had an immediate effect on the market. Wholesale U.S. Gulf gasoline prices jumped \$60 per barrel from pre-hurricane levels of \$75 per barrel to \$135 per barrel.¹⁸ In ten hours, the IEA released an agreement to collectively draw 60 million barrels of oil from stocks.¹⁹ The IEA made a quick decision to respond to a sudden decrease in oil supply.

In comparing these two drawdowns, there is the same philosophy and reasoning, but two very different circumstances. In 2005, there was a sudden oil supply shortage and an observed negative impact. In 2011, the oil supply shortage was not sudden, and the negative impact is a prediction. The 2011 drawdown shows more flexibility in the use of strategic stocks. Even though the prediction of severe market tightness is strong, the IEA is relying on incomplete information and projections. While only time and reflection will truly tell the effect of the IEA's decision, we can look at some initial consequences and draw some conclusions.

This drawdown is also significant because the IEA has coordinated with new players in the world market outside of the member countries. The IEA was originally intended to represent the world demand for energy, and it now only represents a fraction of that. Therefore, the IEA has a need to reach outside of its member countries to coordinate with the rest of the world demand, coming from developing nations such as China and India. In 2009, China was the second largest consumer of oil in the world at 8.324 million barrels per day.²⁰ During this most recent drawdown the IEA informed China before making an announcement.²¹ China then released a statement in support of the IEA's actions.²² At a conference in Beijing five days after the June 23 release, Executive Director of the IEA Nobuo Tanaka recognized that the IEA has "the imperative to bring major emerging economies [like China] into its fold if credibility to act in the name of the global market – such as last week's stock release – is to be maintained."²³ This coordination is important because the IEA's decision strongly influences China, and the IEA is strongly influenced by Chinese demand. Although China is currently building up its own strategic petroleum reserves, there has been no talk about coordinating a release with them or membership into the IEA.

Initial Response

This unprecedented decision caused a stir and brought about many allegations that the IEA had crossed the boundary into the realm of market manipulation. There is a general consensus that strategic oil reserves should not be used to

control prices, one because it could put nations in a vulnerable position if there is a real threat to oil supply, and two because government interventions in commodity markets never really work out as intended. Premature use of strategic stocks can cause unease among the public if there is uncertainty that they would not then be available when needed.

The way in which the IEA made their decision does not point to market manipulation. For one, prices at the time of the decision were not dangerously high, suggesting that prices did not play a huge part in the decision-making. Weekly retail gas prices in the U.S. peaked the week of May 9 at \$4.018 per gallon and prices were on a downward trend when the IEA decided to release strategic stocks.²⁴ Weekly world crude oil prices were also heading down after a high of \$120.84 per barrel during the week of April 29.²⁵ Prices were also not much higher than the average prices for the past few months. The average weekly retail gas price in the U.S. from March to June was \$3.81 per gallon, with prices at \$3.708 the week before the drawdown. The average weekly world crude oil price from March to June was \$112.96 per barrel, and \$113.55 the week before the drawdown. Although the IEA was responding in the context of high prices, there was no obvious price trigger that caused a drawdown. The IEA has been consistent in its position in rejecting the use of strategic reserves to influence prices, for instance the Director of the Office of Oil Markets and Security Didier Houssin in a speech to the U.S. Senate stated, “to use the reserves for price management is dangerous territory and would fail.”²⁶ The circumstances at the time of the IEA decision do not suggest that this action was a response to high prices but instead a preventative measure to offset conditions that would cause economic damage in the future.

This drawdown does have the effect of increasing risks for those who take speculative positions on oil. Whether or not this was a primary motivating factor in the IEA action, the drawdown was seen by analysts as a way to drive speculators out of the market.²⁷ This will also have the effect of sending a message to speculators that there is a possibility of a strategic release of petroleum that increases the risk in their speculative positions on oil.

Another allegation was that this use of the strategic reserves was politically motivated. This criticism was heard mostly from U.S. Republicans charging President Obama with the misuse of the SPR in order to increase public opinion in his favor, but the complaint was shared by others as well, including some analysts and some people in the oil industry.²⁸ The primary accusation that Obama wanted to lower gas prices to help his image seems unlikely as price was not a primary consideration in the decision. But regardless of whether or not price was the trigger for the drawdown, the release of stocks into the market does have an effect on the price and this is certainly not ignored by either the IEA or President Obama. The question is if political motivations influenced the

decision enough to be of concern, as there are politics at play in any such decision.

In the case of the 2011 coordinated response, the decision to use strategic stocks was most likely not primarily influenced by political motives. If President Obama wanted to try his hand at manipulating the market with a stock release, he did not need the IEA's coordination. The president has the authority to release oil from the SPR without a coordinated action, and this has been done before by previous presidents. Also, this stock release is more driven by needs on the other side of the Atlantic because Libyan oil is mostly exported to Europe and European refineries do not have the technical capacity to refine heavier and sourer grades of petroleum. Even though the oil market is global, the action is more pressing in Europe and U.S. coordination is more like an expression of solidarity.²⁹ In addition, usually the U.S. government will poll the industry before a drawdown to gauge potential industrial consequences.³⁰ That the government did not first consult with points to more international coordination rather than U.S. politics.

The IEA decision-making process has an inherent weakness because 28 governments must agree, thus exposing it to the possibility of political influence. This remains the case as the IEA seeks greater flexibility in order to be effective. The emergency response procedures cannot be limited to a rigid mechanism that can only trigger the collective release of stocks. This has been in place before; when the IEA's emergency response procedures were first instituted, there was a 7% threshold mechanism in which an emergency sharing system would be enacted if there was world supply disruption beyond 7%. Changes in the oil market have rendered this system irrelevant and now a supply disruption much lower than 7% could have severe consequences. The IEA's current procedures allow for more flexibility in response to supply disruptions, but any final decision to use strategic stocks is always in the hands of politicians.

Market Reaction

In the days after the IEA's announcement, the imminent drawdown already had an apparent effect on the market. On June 23, NYMEX futures prices dropped over \$4 per barrel of crude oil. It is hard to say for certain what the final result will be. One idea is that this \$4 drop will make its way to the pump and act like a tax cut to consumers.³¹ Prices may still continue to increase afterwards, but these increases will depart from prices \$4 lower. Not all of the savings will make it to the final consumer. Although it makes logical sense that prices at the pump will eventually see a decline, gas prices are stickier downwards. There are

many factors that influence the rising price, but the stockpile release has given a \$4 discount to whatever other increases there may be.

Others point to the eventual need for IEA countries to refill their stockpiles that might cancel out any short-term benefits in the long-run.³² The IEA has not yet released any plans for refilling the stockpiles.³³ They have mentioned that member countries hold a total of over 4.1 billion barrels in stockpiles³⁴ and this number is well over the 90 days of net imports that is set as the required minimum.³⁵ Countries have not made themselves vulnerable with this small release of stocks and could refill their stockpiles slowly in the coming months in order to avoid putting too much extra pressure on demand.

When the IEA announced the release of 60 million barrels of oil, it does not mean IEA members are force-feeding an additional 60 million barrels of supply to the market. In fact, the actual number of strategic stocks that will be released will most likely be less than the 60 million. The 60 million barrels only refers to the amount of oil that the IEA countries have agreed to make available to the market. Whether the market absorbs these additional stocks is left to the market to determine. In this manner, the IEA procedure gives power to the market; if the market does not want additional supplies, there will be no drawdown.

Not only does the IEA give the market the power to decide how much of the available stocks to take, the procedure allows each country's government to determine the method in which they will make stocks available and of which types of stocks. This is not without its complications. Countries can either release stocks from government- or agency-held stocks (if they exist in that country) or reduce stock-holding requirements imposed on the industry. In the case of the former, there is usually a tender process to let industry bid on the available oil. If the industry stockholding requirements are lowered, it is more difficult to put an exact amount of oil into the market, because strategic stocks are usually co-mingled with operational stocks and industry will hold some operational stocks either way. The IEA also leaves the choice of which types of stocks to release up to each member country's individual decision. Most countries hold a mixture of both crude oil and products, as well as different qualities of crudes or different types of products. In the 2011 drawdown, the IEA merely suggested that countries release light, sweet crude—the same quality as the lost Libyan oil.³⁶ The light, sweet crude is much more likely to be absorbed by the market in this instance, but each individual country has the power to make a decision as to what it thinks is best for its situation.

In the few weeks after the announcement on June 23, there has been uncertainty about how much of the released oil will make it to market. One week later, the U.S. released a list of "Apparently Successful Offers," and there were

many more bids than the available 30 million barrels of light, sweet crude from America's SPR.³⁷ The initial results have fifteen bidders selected to pay \$3.3 billion at an average of \$107.19 per barrel.³⁸ This is a sign that there is strong demand for light, sweet crude by refiners. In countries such as France, Italy, and the United Kingdom, all of which have opted to lower stockholding obligations on industry, it is more difficult to determine how much oil will be released and how quickly. For instance, France announced that it will extend the period in which stockholding obligations are reduced all the way until December.³⁹

Some critics of the drawdown have speculated that industry will not take up much of the oil in these conditions. This is especially true in Europe, where there is a mix of products and different qualities of crude oil released instead of only light, sweet crude like in the U.S. Some industry analysts have pointed to already high stock levels of products in Europe as a sign that the availability of more products will have no effect.⁴⁰ Product futures are also in a contango (which means prices are expected to rise and the first futures contract is lower than those contracts that follow for later dates) and industry may just trade around the stock until it is more lucrative to sell it at higher future prices.⁴¹ If this is true, products released from strategic reserves will have a harder time to make it into the market.

Germany was able to sell off 63% of a total of 4.2 million barrels. Half of that amount was offered in products and the other half was crude oil, mostly Middle East heavy crude.⁴² Germany could not sell off the full availability from its strategic stocks because its offer did not replace the missing Libyan light, sweet crude. On the other hand, there was enough demand in the U.S. that the SPR could have sold much more than its 30 million barrels of light, sweet crude to refiners. The IEA did recommend countries to release light, sweet crude, but either the member countries need to heed IEA's recommendations more, or perhaps the IEA needs more influence over what stocks are released.

In the review after the first thirty days, the IEA determined that "the measure had largely achieved its aims to date."⁴³ Due to the release, sweet-sour crude differentials narrowed so that sweet crude was not as expensive compared to sour as before. Refining margins improved, which reduces the likelihood of a lack of supply of products. Overall, the release provided increased supply and decreased the chances of a tight market.

Initial Conclusions

How the IEA evaluates the success of this drawdown will influence how they will use a flexible drawdown in the future. In this coordinated release, the IEA determined that in a season of tight supply there was a forecast of even tighter supply, due to a lack of Libyan oil, no OPEC production increases, and increased demand due to an approaching driving season. IEA countries agreed to offset this future supply imbalance by making strategic stocks available to the market.

While this decision was made more flexibly, in our view the IEA was not playing with the market. The IEA gives as much power as possible to the market. Countries make their strategic stocks available and then the market decides whether they are necessary or not. The nature of an emergency decision such as this should cause some questioning. By necessity, the IEA must make its decision based on limited information simply because the data is not perfect until after it is too late. The IEA has made its decision based upon the best available knowledge. This uncertainty leaves room for doubt and speculation, but it is also a necessity in order to act appropriately in an emergency.

This could be helped through a more open decision-making process, but this is difficult to achieve. The IEA cannot let the market know that it is contemplating a release because this could have unintended effects on the market in advance. They also cannot anticipate every situation. There are so many factors that influence the decision to release stocks that it would be impossible to predict such an alignment of factors to suggest the need for a stockdraw.

This particular strategic release can also be looked at as good practice for IEA countries. While countries are required to have a set procedure in place for an emergency situation, there are always new stumbling blocks when there is an attempt at a coordinated action. We have seen that there has been some confusion about the drawdown procedure, especially around exactly what type of stocks to release and how those will be absorbed into the market. This time, the stakes are not as high to put all the parts in play as quickly as possible. After the results have come out, countries will be able to look back and see what parts of the drawdown process still need improvement. The IEA will then be better prepared to act in future emergency situations.

The IEA could specifically improve their coordination as to which types of stocks should be released into the market. With this drawdown, they have left a good bit up to individual countries to decide. Especially in Europe, this may have caused confusion and inefficiencies in the drawdown procedure. In a situation such as this one where a specific quality of oil is missing from the market, the IEA and member countries could better coordinate what will be released into the market.

Even though final assessments will have to be made after more time has passed, it can still be said that this is a positive improvement in the use of strategic stocks. The flexibility in the decision and in which countries would drawdown stocks should help overcome times of market tightness. It costs the citizens of member nations a lot of money to hold these strategic stocks. Since these stocks can help mitigate a bad economic situation due to oil supply imbalances, they should. In times of tight oil markets, there is less room for supply disruptions. In this instance, a smaller amount of missing supply can have a disproportionate effect on the market. Thus, a small, preemptive drawdown should be able to successfully reduce economic damage.

What must temper this flexibility is that these strategic stocks must be refilled in the future. IEA cannot release stocks too often. If the IEA is to release stocks again in this preemptive manner, they must again make sure that the emergency release is truly needed. It may take a long time to refill the strategic stocks once they have been drawn down because governments do not want to place any extra pressure on the market when filling up oil stocks, especially if prices are already high. One reason that the IEA was able to coordinate this flexible drawdown was because its member countries held much more oil than is required and a drawdown did not have an adverse effect on the nations' securities. But if there were more frequent drawdowns due to expectations of market tightness, the IEA would have to ensure that action was only when it is truly needed, or else the world could find itself out of luck when a more traditional strategic drawdown is needed.

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⁴² Farge, Emma. "Germany to sell heavy Iran crude via IEA tender." *Reuters*. 30 June 2011. reuters.com. Web. 8 July 2011.

⁴³ IEA 30-Day Review of Libya Collective Action. International Energy Agency, 21 July 2011. Web. 23 July 2011.