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The Death of OPEC? The Displacement of Saudi Arabia as the World’s Swing Producer and the Futility of an Output Freeze

CHRISTOPHER HANEWALD*

ABSTRACT

On November 27, 2014, the Organization of Petroleum Exporting Countries met in Vienna and adopted a bold stance against increasing supply from beyond the reach of the cartel. Rather than reduce their own production, the cartel decided to allow market forces to dictate the price of a barrel of oil. By doing this, Saudi Arabia—the de-facto leader of the cartel—made a bet that the burgeoning shale gas industry within the United States would be unable to cope with a sharp fall in the price of oil. Over the course of the following two years, the U.S. energy sector—aided by further technological development—surprised Saudi Arabia with its resiliency to withstand a low oil price environment. This note explores how this tactic by the Organization of Petroleum Exporting Countries was thwarted, why the oil industry is devoid of any global oversight, and what this means for the future of the Oil Industry.

INTRODUCTION

Technological advancements in the last two decades have generated more changes to business and industry than have been experienced since the Industrial Revolution.1 Rapid technological developments

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advances at an exponential rate, a rate of progress that is inherently explosive and thus ‘profoundly transformative.”).

2. While certain industries, such as coal mining, are experiencing their death rattle as environmental regulation and new technology make other energy sources far more viable both fiscally and environmentally, other industries have only had certain segments of their business displaced. See David Rotman, How Technology Is Destroying Jobs, MIT TECH. REV. (June 12, 2013), http://www.technologyreview.com/featuredstory/515926/how-technology-is-destroying-jobs/ (“Digital technologies tend to favor ‘superstars,’ they point out. For example, someone who creates a computer program to automate tax preparation might earn millions or billions of dollars while eliminating the need for countless accountants.”).

3. See id. (“McAfee, associate director of the MIT Center for Digital Business at the Sloan School of Management, speaks rapidly and with a certain awe as he describes advances such as Google’s driverless car.”).

4. See id. (“Modern automotive plants, many of which were transformed by industrial robotics in the 1980s, routinely use machines that autonomously weld and paint body parts—tasks that were once handled by humans.”).

5. See Nathan Cortez, Regulating Disruptive Innovation, 29 BERKELEY TECH. L.J. 175, 182–83 (2014) (“In 1995, Joseph Bower and Clayton Christensen introduced the idea of ‘disruptive technologies’ that depart fundamentally from existing ones, usually by being less complicated, more accessible, and less expensive. Disruptive ‘technologies’—later broadened in the literature to disruptive ‘innovations’—undermine and then displace incumbents.”).

6. See Sandy Manche, Maintaining the Highway Infrastructure as Alternative Fuel Vehicle Usage Increases, 7 KY. J. EQUINE, AGRIC. & NAT. RESOURCES L. 515 (2015) (exploring how an increased use of fuel efficient vehicles has led to a need for additional funding to the Highway Trust Fund).
and one-sided governing bodies of the industry meaningless. While many have ventured to examine individual aspects of the Shale Revolution, none have taken a broad perspective to observe how the pieces affect the whole or why this industry was so susceptible to disruption in the first place. By laying a firm historical basis, I hope to first demonstrate that the absence of regulation within the industry was a conscious decision made by the superpowers that emerged from World War II. That decision, however, inadvertently made the establishment of a cartel monopoly possible. Following the cartel's founding, a status quo developed which firmly divided importers and exporters. Organizations, scholarship, and assumptions were built upon the presumption that the status quo would not change. For decades, this system worked and maintained order—until one day it did not. This Note will scrutinize the external and internal market forces exacting such drastic change today and how previous understandings of the industry are crumbling as the oil market proceeds into unknown territory.

Part I will lay the historical foundation and examine the competing interests that first led to the establishment of the status quo within the oil industry. Part II will turn to an examination of the disruptive technology that has irreversibly changed the once simple industry. I will pay careful attention to cracks and fissures that have already developed as a result of the Shale Revolution, why the previous governing bodies are ill-equipped to handle the new world, and how there is a great possibility for current conditions to worsen. Part III will turn to one comprehensive international treaty, the Energy Charter Treaty, which is the best solution to reconcile two outmoded governing bodies that have recently been rendered meaningless. Finally, Part IV will make the case that the Energy Charter Treaty, due to a number of factors, some more intentional than others, has been positioned as the best equipped body to carry this industry forward into the unknown.

I. BACKGROUND: FROM GATT TO OPEC AND EVERYTHING IN BETWEEN

7. See, e.g., S. Scott Gaille, How Can Governments Accelerate International Shale Development?, 36 ENERGY L.J. 95 (2015) (describing the principal factors influencing the pace of international shale projects); Alexandra B. Klass & Danielle Meinhardt, Transporting Oil and Gas: U.S. Infrastructure Challenges, 100 IOWA L. REV. 947 (2015) (explores the history and geography of oil and natural gas to help explain why U.S. regulation of the infrastructure for transporting these two similar types of energy resources to markets developed so differently); Ross H. Pifer, A Greener Shade of Blue: Technology and the Shale Revolution, 27 NOTRE DAME J.L. ETHICS & PUB. POL’Y 131 (2013) (discussing the continued development of the technology that began the Shale Revolution, which was essential to fully realizing the benefits (and avoiding the adverse effects) of energy resources).
This section explores how the decision to exclude crude oil from any type of international regulation laid the groundwork for the current dysfunctional market. Oil, arguably the most important resource after World War II, was deliberately omitted from early trade negotiations, and that choice by the world superpowers, who at that time controlled Middle Eastern proven reserves, has had profound effects throughout the commodity's history. By first examining the motivation for international exclusion following WWII, and then turning to the lead up to and founding of the Organization of Petroleum Exporting Countries (OPEC), I will lay a historical foundation that will be useful when examining contemporary issues facing the industry. This early rejection of regulation led to the later development of a bifurcated system in which a firm line developed between importers and exporters.

Following the conclusion of WWII, the world entered a new age of connectedness. In December of 1945, just five months after the Japanese surrendered in the Pacific, fifteen countries came together with a goal to reduce and bind tariffs. These original countries recognized the new era that technology had ushered in and hoped to "give an early boost to trade liberalization, and to begin to correct the legacy of protectionist measures which remained in place from the early 1930s." These negotiations eventually resulted in numerous trade rules and over forty-five thousand tariff concessions that affected more than $10 billion in global trade. When this agreement was finally signed on October 30, 1947, the signatories had expanded to twenty-three countries. On June 30, 1948, the tariff concessions became effective and with that, the first General Agreement on Tariffs and Trade (GATT) brought about a new era of global economic cooperation.

The original signatories of the 1948 GATT intended to create an International Trade Organization (ITO), however, later negotiations

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8. See Petroleum Reserves Definitions, Soc'y of Petroleum Engr's, http://www.spe.org/industry/petroleum-reserves-definitions.php (Mar. 1997) ("Proved reserves are those quantities of petroleum which, by analysis of geological and engineering data, can be estimated with reasonable certainty to be commercially recoverable; from a given date forward, from known reservoirs and under current economic conditions, operating methods, and government regulations.").


10. Id. See also John H. Jackson, The WTO 'Constitution' and Proposed Reforms: Seven 'Mantras' Revisited, 4 J. INT'L ECON. L. 67, 68 (2001) (identifying a primary objective of the GATT founders in the aftermath of World War II as avoiding another war by reducing the economic conditions that were seen as evocative of conflict).

11. See The GATT Years: From Havana to Marrakesh, supra note 9.

12. Id.

13. Id.
were ultimately for naught. Their efforts to ratify the ITO proved to be an impossible task for the negotiating countries and therefore “the GATT became the only multilateral instrument governing international trade from 1948 until the WTO was established in 1995.” While successive GATT agreements continued to prevail in the interim, the Uruguay Round of 1986 eventually led to the creation of the World Trade Organization (WTO), nearly a half century after the failure of the ITO. Contained within this momentous agreement were provisions covering “almost all trade, from toothbrushes to pleasure boats, from banking to telecommunications, from the genes of wild rice to AIDS treatments.”

Global economics were undeniably changed in 1948 with GATT and further strengthened with the eventual creation of the nearly all-encompassing WTO. There is, however, one element of the global economy that was either ignored or strategically excluded throughout this long history of negotiations—crude oil.

World War II brought to light another important revelation: the foreseeable future of economic development was inextricably linked to the control and steady supply of fossil fuels. The new world superpowers emerged from WWII understanding that oil had become, arguably, the most important resource. The United States, United Kingdom, Belgium, and France, all signatories of the original GATT, recognized the strategic importance and proceeded to establish control over the proven reserves of oil.

By the time GATT negotiations had begun “[m]ost of the oil fields were under the control of the American, British, Dutch, or French multilateral enterprises.” Therefore, as GATT negotiations continued, “these countries would have liked to avoid tensions over the control of resources, they seemed to implicitly exclude the most strategic

14. Id.
15. Id.
17. Id.
18. Wen-chen Shih, Energy Security, GATT/WTO, and Regional Agreements, 49 NAT. RESOURCES J. 433, 436 (2009) (“For most of the industrialized countries, one crucial aspect of energy security is the supply of oil and natural gas at reasonable prices.”).
20. See Susan L. Sakmar, Bringing Energy Trade into the WTO: The Historical Context, Current Status, and Potential Implications for the Middle East Region, 18 IND. INT’L & COMP. L. REV. 89, 90 (2008) (“Due to the strategic importance of petroleum and the initial non-participation of most key energy exporters in the early GATT rounds, energy products have largely been exempted from multilateral trading rules.”).
21. Shih, supra note 18, at 439.
international commodity—crude oil—from the GATT negotiations."  
Support for the argument that this exclusion was deliberate is strengthened by the fact that none of the oil-exporting countries were Contracting Parties to the GATT.  
Early control by world superpowers quickly waned due to a rash of expropriations and, in one decisive move, which was certainly not anticipated by the signatories of the 1948 GATT, OPEC was formed on September 14, 1960.  
The system that developed following OPEC's creation was one in which cooperation was dis-incentivized from the OPEC members' perspective.  
Following decades of colonial control, proceeded by effective control via multinational corporations, OPEC members found themselves, for the first time ever, in control of the future of their countries. Expropriations grew more frequent and in July 1971, OPEC “announced that it would take ‘immediate steps toward the effective implementation of the principle of Participation.’”  
Member countries wanted control of their country's resources, and although foreign oil companies initially fought this push, they ultimately lost the battle. “[B]y 1972 the OPEC member nations were granted control over major oil company operations, either immediately or else on a strict timetable for gradual government ownership [sic].”  
In October 1973, on the back of successful and relatively unchallenged expropriations, OPEC brought the oil-dependent, non-OPEC countries to their knees.  
OPEC flexed its new and full power when the members imposed an “embargo on petroleum exports to several countries, including the United States.”  

22. Id.  
23. Id. Additionally, scholar Wen-chen Shih goes so far as to insinuate the strategic aspect of the exclusion. Id. (“A 'gentlemen's agreement,' perhaps, was in place in the GATT's early history to continue excluding issues relating to trade and price of crude oil from the GATT framework.”).  
25. See Tim Carey, Comment, Cartel Price Controls vs. Free Trade: A Study of Proposals to Challenge OPEC's Influence in the Oil Market Through WTO Dispute Settlement, 24 AM. U. INT'L L. REV. 783, 788 (2009) (“At its inception, the goal of OPEC's founding members was to protect the collective bargaining power of oil producing nations from protectionism and the coordinated operations of the world's largest oil corporations.”).  
26. See Hickel, supra note 24, at 108 n.7 (“In 1960, the five major oil-producing countries—Iran, Iraq, Kuwait, Saudi Arabia, and Venezuela—received a total of more than two billion dollars in oil revenues.”).  
27. Id. at 110 (quoting Org. Petroleum Exporting Countries [OPEC], Res. XXIV-135, OPEC Twenty-Fourth Conference (July 13, 1971)).  
29. See id. at 107, 110.  
30. Id. at 107.
embargo was lifted in April 1974, both OPEC and non-OPEC countries alike recognized that control and access to a stable flow of oil had become the single most important resource on which the entire global economy was built.

In reaction to the embargo and in an attempt to regain some semblance of control, the International Energy Agency (IEA) was founded in 1974.31 The IEA was formed “to help countries co-ordinate a collective response to major disruptions in the supply of oil.”32 While ideally viable, the IEA suffers from a severe lack of bargaining power. The IEA is comprised of twenty-nine member countries that must demonstrate they are a net oil importer, [with] reserves of crude oil and/or product equivalent to 90 days of the prior year’s average net oil imports to which the government (even if it does not own those stocks directly) has immediate access should the Co-ordinated Emergency Response Measures (CERM) – which provide a rapid and flexible system of response to actual or imminent oil supply disruptions – be activated.33

While the strategic reserve system established through the IEA, in theory, protects member countries from immediate disruptions,34 the group itself still concedes “the IEA follows short- and medium-term developments on the international oil market.”35

The inherently defensive nature of the IEA was clear from its founding and built solely to protect member countries from a repeat of the 1973 oil shock. While the group today wishfully places itself at “the heart of global dialogue on energy, providing authoritative statistics and

32. Id.
34. See Petroleum Reserves, U.S. DEPT. OF ENERGY: OFF. OF FOSSIL ENERGY, http://energy.gov/fe/services/petroleum-reserves (last visited Nov. 18, 2016) (“Established in the aftermath of the 1973-74 oil embargo, the SPR provides the President with a powerful response option should a disruption in commercial oil supplies threaten the U.S. economy. It is also the critical component for the United States to meet its International Energy Agency obligation to maintain emergency oil stocks, and provides a national defense fuel reserve.”).
analysis," it is undeniable that the IEA is effectively without any true multilateral power, other than as a trusted statistician.

With the dividing lines drawn clearly between importers and exporters, the market, since September 14, 1960, has been left to develop in response to the dictates of OPEC. Organizations such as the IEA can attempt to mitigate damage and, additionally or separately, regional trade agreements (RTAs) can be signed in the hopes of ensuring stability on an individual country level. It is, however, indisputable that trade in the single most important commodity has been effectively unregulated since the realization of its supreme importance following World War II. Clearly, the superpowers never envisioned the possibility of an OPEC-like regime, or else one would imagine that the regulation of oil would have been the subject of a majority of the debate in the lead-up to the 1948 GATT. Furthermore, since oil-exporting countries banded together to form the most powerful cartel on the planet, there has never once been an incentive for these formerly dominated colonies to consider the fairness of the policies governing their monopoly—until now.

II. TECHNOLOGICAL BREAKTHROUGHS LEADING THE OIL MARKET INTO UNPRECEDENTED TERRITORY

In this section, recent technological developments within oil exploration and production, which have effectively turned all previous scholarship regarding the industry on its head, will be carefully examined. Up until the mid-2000s, the oil industry was believed to be generally understood and subject to little surprise. OPEC dictated

37. See Oil, supra note 35 ("The IEA prepares current oil market assessments from information submitted by IEA member and non-member countries, international oil companies and via an extensive network of market intelligence contacts. Issues covered include: oil exploration and production, oil demand by main product and sector, upstream and downstream investment levels, geopolitical developments, inventory levels, oil refining and international trade in crude and products.").
38. See Rafael Leal-Arcas et al., Multilateral, Regional and Bilateral Energy Trade Governance, 6 RENEWABLE ENERGY L. & POLY REV. 38, 49–50 (2015) ("RTAs currently represent a major, and perhaps perhaps irreversible, characteristic of the multilateral trading system. Since the mid-1990s, there has been a virtual explosion in the number of economic integration agreements (EIAs) concluded. According to the World Trade Organization website, as of 15 June 2014, some 585 notifications of RTAs (counting goods, services and accessions separately)—379 of which are in force—had been received.").
39. This general understanding, however, was focused on a pessimistic view of diminishing resources. See John E. Rhea, Privatization in the International Petroleum Industry: The Interplay Between Politics, Economics, and Reliance, 33 DENV. J. INT'L L. & POLY 609 (2005) ("In the very near future the world will experience an energy crisis and a
prices and controlled supply in response to lulls in demand—also known as a cyclical correction. This understanding in addition to previous assumptions regarding peak oil, viability of shale oil, and OPEC’s future in the world of oil production have all been called into question within the last decade.

A. Current Market Issues

The Shale Revolution in the United States has profoundly and irreversibly altered the global energy landscape. Beginning in earnest in 2006, independent U.S. oil companies began utilizing a new technology called hydraulic fracturing (fracking). The process of fracking involves the pumping of a mixture of water and sand down previously drilled and cased wells. The pressure at which the mixture is pumped into the well, coupled with the mixture’s ability to open up— or fracture —small crevices already existing in the impervious rock layers some six to ten thousand feet below the surface, allows previously untapped oil reserves to flow freely enough to be pumped from the ground.

shock to economic systems much like that experienced in the 1970s and mid-1980s. Only this time, the end of production will not be the result of any unilateral exercise of sovereign power. Instead, the crisis will result from an actual worldwide depletion of fossil fuel resources.


41. For a definition of “peak oil,” see N.E. “Skip” Maryan, Peak Oil: The End of The Roller Coaster Ride? Implications for Law and Policy, 52 ROCKY MTN. MIN. L. INST. 1-1, § 1.03 (2006) (“The term ‘Peak Oil’ can be defined as the point at which half the total world oil supply known to exist has been consumed.”); Edna Sussman, A Multilateral Energy Sector Investment Treaty: Is It Time for a Call for Adoption by All Nations?, 44 INT’L LAW. 939, 947 (2010) (“Numerous reports and vigorous debates about ‘peak oil,’ i.e. when oil production reaches a peak leaving only diminishing stocks for the future, have been issued.”).

42. See Christopher Goncalves, Breaking Rules and Changing the Game: Will Shale Gas Rock the World?, 35 ENERGY L.J. 225, 227 (2014) (“The evolving results of this disruptive activity could be revolutionary in the United States and worldwide. It positions the United States to transform itself from a net importer to a net exporter of natural gas by the end of this decade, with oil perhaps soon to follow, and it threatens to fundamentally alter global LNG commercial and pricing practices.”).

43. See id. at 232 (citing IVAN SANDREA, US SHALE GAS AND TIGHT OIL INDUSTRY PERFORMANCE: CHALLENGES AND OPPORTUNITIES 2 (2014)).


45. See id.
Regardless of one’s personal belief concerning the process of fracking, the utilization of this process has led to the “US . . . currently experiencing a transition period in which it could, after decades of being a major energy importer, evolve into a major energy exporter due to the unprecedented surge of US domestic energy production.” Frankly, even a decade ago, a claim like this would have assuredly received prompt dismissal from even the foremost scholars within the industry. Today, however, scholars no longer need to hypothesize and can state with authority that “[t]he combination of horizontal drilling and hydraulic fracturing (fracking) has transformed the United States from a net importer of natural gas to a country that is set to become a net exporter by 2015.” While the domestic production of oil has grown at a rapid pace, Tincher’s quote actually refers to liquefied natural gas (LNG), which has experienced such exponential growth that “[p]rojects originally intended as natural gas import pipelines are now being proposed as liquefied natural gas (LNG) export pipelines.” Beginning in 2013 and continuing through most of 2014, these developments were lauded by Wall Street and Washington alike.

46. Hydraulic fracturing is an extremely divisive issue. However, this debate is beyond the purview of this note. It should be noted, though, that many previous claims about environmental impacts on the water table have been debunked and one must endeavor to fully research this topic before blindly believing claims made by either side on this debate. See Seamus McGraw, Is Fracking Safe? The 10 Most Controversial Claims About Natural Gas Drilling, POPULAR MECHANICS, (May 1, 2016), http://www.popularmechanics.com/science/energy/g161/top-10-myths-about-natural-gas-drilling-6386593/ (“But the idea stressed by fracking critics that deep-injected fluids will migrate into groundwater is mostly false. Basic geology prevents such contamination from starting below ground. A fracture caused by the drilling process would have to extend through the several thousand feet of rock that separate deep shale gas deposits from freshwater aquifers.”).

47. Leal-Arcas et al., supra note 38, at 76.

48. Gina Tincher, The Unconventional Gas Technical Engagement Program: How to Ensure the United States Shares Its Experience in a Socially and Environmentally Responsible Manner, 36 ENERGY L.J. 113, 114 (2015). See Today in Energy, U.S. ENERGY INFO. ADMIN. (Mar. 30, 2015), http://www.eia.gov/todayinenergy/detail.cfm?id=20572 (“U.S. crude oil production (including lease condensate) increased during 2014 by 1.2 million barrels per day (bbl/d) to 8.7 million bbl/d, the largest volume increase since recordkeeping began in 1900. On a percentage basis, output in 2014 increased by 16.2%, the highest growth rate since 1940. Most of the increase during 2014 came from tight oil plays in North Dakota, Texas, and New Mexico where hydraulic fracturing and horizontal drilling were used to produce oil from shale formations.”).


The self-congratulatory American cheers were stifled, however, when OPEC producers met on November 27, 2014 and made a bold statement in the face of American ingenuity. OPEC's secretary general, supported by all member countries, announced that OPEC would not support 2014 record oil prices by reducing production and ceding market share to the burgeoning U.S. producers; instead, it opted to see "how the market behaves, because the decline of the price does not reflect a fundamental change." Following the announcement, benchmark Brent crude oil prices dropped from summer 2014 highs of over $110 a barrel to $69.05 following the announcement. The thirty percent price decline in the months leading up to the November meeting was due to "sluggish global demand and rising production from the U.S."

In the two years since OPEC members shocked both the world and oil market, prices have fluctuated wildly from $28 to $60 a barrel. Ultimately, the decision by OPEC to refuse to prop up oil prices by cutting production was strategic in nature. At the time of the November announcement, costs associated with fracking led to a breakeven point for U.S. producers that were substantially higher than the price it costs for OPEC members to produce the same barrel of oil. Therefore, the strategy was quite simple. Keep OPEC member production steady at

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2014 financial performance in a variety of sectors, showed that it was a strong year for U.S. shale players, whose earnings growth outpaced industry heavyweights."; Daniel Yergin, Congratulations, America. You're (Almost) Energy Independent., POLITICO MAG. (Nov. 2013), http://www.politico.com/magazine/story/201311/congratulations-america-youre-almost-energy-independent-now-what-098985 (citing President Barack Obama in a 2012 presidential debate) ("On energy, Governor Romney and I, we both agree that we've got to boost American energy production, and oil and natural gas production are higher than they've been in years.").


53. See id.

54. See id.

55. Id.


57. At the time of the November 27, 2014 announcement, the general breakeven point for U.S. shale producers was believed to be in the range of $80 a barrel, highly dependent on the location of the shale formation. See Mark J. Perry, Saudis' Drive to Kill US Shale Has Backfired, AM. ENTERPRISE INST. (May 26, 2015), https://www.aei.org/publication/saudis-drive-to-kill-us-shale-has-backfired/. In stark contrast, it costs Saudi Arabia only about $2 to produce a barrel of oil. Production costs vary among OPEC members, however, they are all well below Shale production costs. See Tim Mullaney, Opinion: OPEC Is Wrong to Think It Can Outlast U.S. on Oil Prices, MARKETWATCH (Dec. 2, 2014, 5:01 AM), http://www.marketwatch.com/story/opec-is-wrong-to-think-it-can-outlast-us-on-oil-prices-2014-12-02.
thirty million barrels per day, allow the global supply glut to worsen enabling a free fall in the price of oil, and watch as American producers either defaulted under massive debt loads or were forced into bankruptcy due to low prices and heavily leveraged assets.\textsuperscript{58}

\textbf{B. Potential for Worsening of Market Conditions}

At the outset, OPEC’s strategy appeared simple, straightforward, and bound for success; however, recent developments within the last two years have led to questions concerning the long-term feasibility of this plan. Drastic strides in U.S. shale technology have led to substantial gains in efficiency. The historic implementation of the Joint Comprehensive Plan of Action with Iran, beginning on October 18, 2015, has resulted in the lifting of international sanctions and allowed Iran to rejoin the oil production market.\textsuperscript{59} Additionally, lost revenue from the drop in oil prices appears to be taking its toll within OPEC, as many members have begun voicing concerns regarding unbalanced budgets and domestic social strife.\textsuperscript{60}

While falling oil prices have assuredly taken their toll on domestic oil companies,\textsuperscript{61} the complete collapse and wave of bankruptcies that OPEC’s plan hinged upon has yet to occur.\textsuperscript{62} There are multiple reasons for this resilience on behalf of U.S. oil producers. First, banks and noteholders that allowed U.S. producers to borrow billions in the “gold-

\begin{itemize}
  \item \textsuperscript{58} See Oil Prices Plunge After OPEC Meeting, supra note 52. See also Wayne Duggan, The U.S. Shale Producers Operating with Unsustainable Debt, YAHOO FINANCE (Sept. 18, 2015), http://finance.yahoo.com/news/u-shale-producers-operating-unsustainable-160122635.html.
  \item \textsuperscript{60} See Kenneth Rapoza, Venezuela on the Brink, Large Protest Seeks to Pressure President to Resign, FORBES (Aug. 19, 2016, 12:57 PM), http://www.forbes.com/sites/kenrapoza/2016/08/19/venezuela-on-the-brink-large-protest-seeks-to-pressure-president-to-resign/#172c3e49f4c1.
  \item \textsuperscript{61} See Kira Brecht, Oil Stocks May Have Hit Bottom: Here’s What to Expect Next, U.S. NEWS, (July 21, 2015, 9:09 AM), http://money.usnews.com/money/personal-finance/mutual-funds/articles/2015/07/21/oil-stocks-may-have-hit-bottom-heres-what-to-expect-next.
  \item \textsuperscript{62} While there have been a number of bankruptcies and defaults, so far, only the weakest and least prepared have suffered. See Matt Krantz, Corporate Default Rate Expected to Jump 30%, USA TODAY (Aug. 21, 2016, 4:54 PM), http://www.usatoday.com/story/money/markets/2016/08/19/corporate-default-rate-expected-jump-30-soon/88967964/ ("Stocks in the energy and natural resources industries have accounted for 57% of defaults the past 12 months, S&P says."); Asjlyn Loder et al., Oil Crash Risks $19 Billion Wave of Junk Debt Defaults, BLOOMBERG (March 11, 2016, 12:01 AM), http://www.bloomberg.com/news/articles/2016-03-11/oil-boom-fueled-by-junk-debt-faces-19-billion-wave-of-defaults (last visited Nov. 17, 2016) ("Since the start of 2015, 48 oil and gas producers have gone bankrupt owing more than $17 billion, according to law firm Haynes and Boone.").
\end{itemize}
rush" between 2008 and 2014 are heavily incentivized to renegotiate credit lines with producers, as outright declaration of bankruptcy could significantly harm banks and the economy writ large due to the sheer amount of money leveraged within the industry. While banks have renegotiated credit lines and cut the ability of small producers to borrow more money and forestall bankruptcy, the issue remains that loans are secured on the proven reserves of these companies and "oil wells operated by an insolvent producer could also keep pumping if they're acquired by another company, or taken over by creditors in a bankruptcy."

Second, the technology that first allowed U.S. producers to access shale oil has exponentially improved within the last two years. Forcibly stimulated by OPEC's strategy, U.S. producers "have brought down costs by securing price cuts from service providers and pioneering more efficient recovery methods." Once thought to not be feasible below $80 a barrel, producers in some areas of the country, most notably North Dakota's prolific Bakken formation, have managed to lower breakeven costs into the $20 range. In Texas's Eagle Ford formation, drillers have managed to cut the time it takes to drill a well down to just seventeen days resulting in a reduction in "the cost of drilling wells from $4.5 million to $3.5 million." These gains in efficiency have led Goldman Sachs to predict that prices will remain around $50 a barrel for the next five years as "[s]hale efficiency and innovation have created a new ceiling for the price of oil." While initially it may have appeared that OPEC's strategy was succeeding for a time, as evidenced by the IEA's consistent announcements of declining U.S. oil rig count, the narrative has

65. Id.
67. See id.
68. Additionally, the reduction in the amount of time it takes to bring a well on-line might mean that even if the Saudi strategy succeeds in the near term, American Shale producers will simply rejoin the market when prices climb back to profitable levels. See Perry, supra note 57.
69. Id.
70. See OPEC, MONTHLY OIL MARKET REPORT, 12 OCTOBER 2015 3 (2015).
recently reversed. In May 2016, the oil market had staged a modest recovery in price due to unanticipated supply outages,\(^71\) decreasing non-OPEC supply,\(^72\) and the ever-present possibility of an OPEC supply output freeze.\(^73\) While optimism of a wide-scale price recovery momentarily flourished, it was almost immediately stifled as a direct result of the efficiency gains already discussed.\(^74\) This ebb and flow—fleeting optimism followed by crushing increases in U.S. rig count and OPEC supply—has dominated the summer of 2016 and there appears to be no end in sight.\(^75\) Whenever prices incrementally recover and approach the $50 threshold, U.S. shale producers can simply return to previously drilled and idled wells to turn the proverbial faucet back on,\(^76\) thus immediately jeopardizing any semblance of a price recovery.

Additionally, Iran’s recent agreement with the United States and other negotiating countries to the Joint Comprehensive Plan of Action on October 18, 2015 has resulted in the lifting of sanctions levied against Iran that have been in place for years.\(^77\) The removal of sanctions has led to Iran aggressively ramping up production as Oil

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72. Katy Barnato, *Oil Will Soon Stage a 'Fundamental Price Recovery': Analyst*, CNBC (May 23, 2016, 8:36 AM), http://www.cnbc.com/2016/05/23/oil-will-soon-stage-a-fundamental-price-recovery-analyst.html (“The U.S. rotary rig count last week was down two at 404, Baker Hughes reported. That was 481 rigs down on last year and the lowest since Baker Hughes started counting rigs in 1949.”).

73. Benoit Faucon et al., *OPEC Officials: May Discuss Oil Freeze at June Meeting*, WALL STREET J. (Apr. 21, 2016, 1:57 PM), http://www.wsj.com/articles/opec-secretary-general-says-cartel-may-discuss-oil-freeze-at-june-meeting-1461234875 (“A production freeze was an idea that had helped send prices rallying more than 50% from 12-year lows last winter.”).

74. See Devika Krishna Kumar, *Oil Slides as U.S. Rig Count Rises, Economy Concerns*, REUTERS (June 3, 2016), http://finance.yahoo.com/news/brent-crude-oil-stabilizes-around-011309919.html (“The increase in the rig count as prices near the $50/bbl range is clearly indicative of the elasticity of U.S. production and speaks to the tremendous efficiency gains reaped by the U.S. producer community over recent years,” said Michael Tran, director of energy strategy at RBC Capital Markets in New York.”).


76. *Oil Settles Down 3.03% at $47.05, Breaking Seven-Day Winning Streak*, CNBC (Aug. 22, 2016, 2:37 PM), http://www.cnbc.com/2016/08/21/oil-prices-fall-as-analysts-say-august-price-rally-has-been-overblown.html (“Adding to the bearish sentiment, U.S. drillers added 10 oil rigs in the week to Aug. 19 as crude rebounded towards the key $50 mark that makes a return to the well pad viable. . . . [T]he 32 rigs added in August alone would add close to 200,000 bpd of extra supply through 2017.”).

Minister Bijan Namadar Zanganeh hopes to "reach a figure between 3.8 and 3.9 million barrels a day."\textsuperscript{78} Furthermore, due to current market conditions and Iran's desperate need to raise revenue after years of devastating sanctions, there currently exists a stalemate between the two most important members of OPEC: Saudi Arabia and Iran.\textsuperscript{79} Iran has adamantly expressed an unwillingness to negotiate with OPEC until it can attain pre-sanction oil production levels.\textsuperscript{80}

Furthermore, recent internal squabbling within OPEC is not unique to Iran's return to the global market. Other members, especially those less fiscally prepared, such as Venezuela and Nigeria, have expressed significant concern regarding the oil price rout.\textsuperscript{81} The historically united front is beginning to show weaknesses as members have begun fighting for market share within OPEC as "the semblance of unity has vanished when setting monthly selling prices."\textsuperscript{82} The most obvious reason for the heightening of tensions within the group is the growing concern over what the price collapse has done to member country's budgets. While OPEC members can produce a barrel of oil at a fraction of the cost of U.S. producers,\textsuperscript{83} the member countries' budgets are so oil revenue-centric that questions have begun to arise about whether members can survive the current price environment.

Saudi Arabia, the quasi leader and member with the largest reserves,\textsuperscript{84} is "expected to post a budget deficit of almost twenty percent of gross domestic product this year, according to the International Monetary Fund."\textsuperscript{85} This significant decline in oil revenue could have far-reaching political implications for member countries as they balance budgets by cutting social programs typically funded by the wealth


\textsuperscript{79} See John Kemp, Saudi Arabia Turns Oil Weapon on Iran: Kemp, REUTERS (Apr. 18, 2016, 9:01 PM), http://www.reuters.com/article/us-oil-meeting-kemp-idUSKCN0XP2AR ("Saudi Arabia will not accept any constraints on its output, even freezing at record levels, unless Iran agrees to similar controls, which it has rejected until production has reached pre-sanctions levels.").

\textsuperscript{80} See Iran Aims to Boost Oil Exports Without OPEC's Blessing—Minister, RT, (Nov. 18, 2015, 11:58 AM), https://www.rt.com/business/322538-iran-oil-opec-sanctions/.


\textsuperscript{82} Id.

\textsuperscript{83} See Mullaney, supra note 57.


\textsuperscript{85} Cheong, supra note 81.
produced from oil rents. While some countries are better positioned to withstand the downturn—such as United Arab Emirates, which only requires an oil price of $77.30 a barrel in order to balance their 2015 fiscal budget—other countries like Algeria, Venezuela, Nigeria, and Libya all require well over an impossible threshold of $120 a barrel or more just to balance their budgets.

C. Antiquated Organizations

Considering the number of topics covered thus far, one cannot help but question whether OPEC and the IEA represent vestiges of the past bound for relegation to the periphery of history. In addition to the concerns already covered, recent announcements have cut to the very core purpose of both organizations.

It appears that the Shale Revolution within the United States has begun to threaten the core purpose of the IEA. The United States in 2011 "exported more gasoline, diesel and other fuels than it imported for the first time since 1949." While 2011 certainly marked a great achievement for United States refineries, the greater victory came when growing domestic oil production actually surpassed imports in 2014. With this development, the United States is actually at risk of—by definition—exiting the IEA as it no longer meets membership requirements of being a net-oil importer.

Moreover, a recent momentous event occurred on December 18, 2015 when "Congress voted to put an end to the problem [of oil market distortions between Brent Crude and West Texas Intermediate Crude]

86. The current government of Venezuela and the country as a whole may be the first casualty of OPEC's price war. See Venezuela Scrambles to Head Off Collapse, Yahoo! Finance (May 16, 2016), http://finance.yahoo.com/news/venezuela-scrambles-head-off-collapse-184401832.html ("The IMF predicts inflation will top 700 percent this year before surging to some 2,200 percent next year."); Tom DiChristopher & John W. Schoen, OPEC States that Wanted Production Cuts Buckle Under the New Oil Order, CNBC (June 1, 2016, 10:41 AM), http://www.cnbc.com/2016/06/01/opec-states-that-wanted-production-cuts-buckle-under-the-new-oil-order.html?__source=newsletter%7Ceveningbrief ("Street protesters are calling for President Nicolas Maduro to step down, leading to confrontations with police. Maduro's party does not hold a majority in the Venezuelan legislature, and friction between the two branches of government has led to a constitutional crisis.").
87. OPEC: The Cartel is Standing Pat on Production, for Now, supra note 84.
90. See Member Countries, supra note 33.
by lifting the 40-year-old [oil] export ban as part of an omnibus budget bill."91 While the immediate effect of this change in domestic policy will be subdued due to the current persistent low price environment, the medium- to long-term effects could be substantial.92 Whenever a significant price recovery does occur, the political and economic implications could be profound as many expect "US crude oil exports to compete in Asia with the Middle East, Russia and Africa,"93 as the U.S. shifts to a position as a predominate exporter.94

An additional acknowledgement of the archaic nature of IEA strategy appeared within the same budget negotiations that yielded the lifting of the domestic export ban. Contained within the Bipartisan Budget Act of 2015 was an agreement to sell fifty-eight million barrels of oil from the strategic reserve.95 This announcement has spurred an interesting debate among economists regarding whether the strategic reserve still serves its once useful purpose.96

While the IEA is subject to nagging questions from within regarding its usefulness in the current world, OPEC’s purpose is rapidly eroding due to external forces and the looming possibility of those conditions worsening. As has already been noted, the internal cracks of OPEC are growing ever more prominent with every passing month of this price rout.97 The future purpose of OPEC is even less clear when one accounts

92. Skip York, U.S. Lifts the Ban on Crude Oil Exports: When Might It Matter for Producers?, FORBES (Jan. 19, 2016, 01:10 PM), http://www.forbes.com/sites/woodmackenzie2016/01/19/us-lifts-the-ban-on-crude-oil-exports-when-might-it-matter-for-producers/#2e61e861328d ("As oil prices recover, we expect growth of US crude oil production to return fast enough to eventually widen the Brent-LLS price differential enough to make US crude oil exports viable. Based on our current oil market outlook, it could take several years for the US crude oil export window to open.").
93. Id.
94. Id. ("Combined with Cheniere loading its first LNG export cargo from its Sabine facility later this spring, the US is shifting from the world’s largest petroleum importer to growing exporter. In less than five years, that concept has gone from the ridiculous to reality.").
97. See Cheong, supra note 81.
for the shale formations beyond U.S. borders. As one scholar notes, "Shale formations are hardly unique to the United States. They span across every continent, offering their bounty to dozens of nations."98 While the U.S. was the first to develop the technology and infrastructure to exploit its shale reserves, it will assuredly not be the only country to utilize recent technological innovation to tap these fields. In fact, the U.S. State Department formed the "Unconventional Gas Technical Engagement Program (UGTEP), under the Bureau of Energy Resources."99 This program was developed to "help countries identify and develop their unconventional natural gas resources safely and economically,"100 through the sharing of "technical expertise [and] regulatory experience."101

With the development of UGTEP, the U.S. is effectively attacking the future viability of OPEC through the dissemination of technology and information. This could have rather significant repercussions when one considers that "China (~31 Tcm), the U.K. (~1 Tcm), Eastern Europe (~10 Tcm), Argentina (~23 Tcm), Australia (~12 Tcm), India (~3 Tcm), and Indonesia (~1 Tcm) all have substantial technically recoverable shale reserves. By comparison, the United States has a reported 19 Tcm of reserves."102 While some of these countries face significant hurdles in the development of these formations,103 the important takeaway from this Note is simply to acknowledge the latent power that lies in the potential for development. Considering that the U.S. development has already caused such a significant disruption, one can hypothesize that the potential impact of other countries pursuing this rapidly advancing technology.

While it is tempting to postulate about the future of these organizations in this new energy landscape, it is ultimately an unnecessary exercise in frivolity. What is important for the purpose of this Note is to recognize that a number of both internal and external factors are conspiring against the traditional purpose and future utility of these organizations. One can simply posit at this time that there is

98. Gaille, supra note 7, at 95.
99. Tincher, supra note 48, at 120.
100. Id.
101. Id.
102. Gonclaves, supra note 42, at 256.
103. Hydraulic fracturing is a water intensive process, which requires significant surrounding infrastructure to even begin to adequately develop Shale Reserves. Andrew Steer, Shale Energy Potential Depends on Water Supply, WORLD RESOURCES INST. (Sept. 9, 2014), http://www.wri.org/blog/2014/09/shale-energy-potential-depends-water-supply ("Shale resource development can require large volumes of water: as much as to 25 million liters, or 6.6 million gallons, for each well. And much of the fresh water used in hydraulic fracturing cannot be recycled.").
rapidly approaching a moment when members of these organizations will be forced to reckon with the future and, for the first time ever, take a seat at the same table to discuss the future of this commodity.

D. Cyclical Market Correction or Systemic Change in Oil Market Price

Much has been written regarding the cyclical nature of commodity pricing and, more specifically, the oil markets.104 Driven by fluctuations in global supply and demand, markets eventually respond with corresponding peaks and troughs. During a period of weak demand, say in the year immediately following the 2008 global financial crash, the market will respond with lower prices until one of two things happens: either supply is cut by producers or market demand eventually recovers.105 These two methods have been frequently employed as "[t]he cyclical nature of the oil and gas industry has been evident over the past 30 years."106 This cyclical response was clear in 2008 when prices rapidly recovered due to global recovery and heavy stimulus beginning in 2009 and 2010.

As has been discussed, however, this new oil era is unlike anything so far experienced or studied. Scholarship regarding cyclical corrections appears to be ill-equipped to explain the current operation of the market. Momentum is building behind scholars who are arguing that this is not a cyclical market correction but is instead a systemic change in the factors that affect the price of oil. While the drastic slashing of

104. See generally Paul Stevens, Oil Markets, 21 OXFORD R. ECON. POL'Y 19 (2005) ("If the cyclical school is believed then what goes up comes down . . . . The cyclical school argues that all drivers of oil prices since December 2002 have been pushing in the same direction. Thus, in the wet barrel market, demand has been exceptionally strong and, for 2004, is the highest global growth in oil demand since 1978."); Harry Bloch et al., Commodity Prices, Wages, and U.S. Inflation in the Twentieth Century, 26 J. POST KEYNESIAN ECON. 523 (2004) ("Our approach to modeling primary commodity prices, wages, and inflation builds on . . . the cyclical behavior of prices of primary commodities, wages, and finished goods on world markets."); John H. Brown & Mark Partridge, The Death of a Market: Standard Oil and the Demise of 19th Century Crude Oil Exchanges, 13 R. INDUS. ORG. 569 (1998) (using the monthly percent change in industrial production to control for cyclical factors that influence the final demand for crude and refined oil to explain why an efficient mechanism for price discovery was discarded in favor of internal pricing by Standard Oil).

105. See Mark Kelman, Could Lawyers Stop Recessions? Speculations on Law and Macroeconomics, 45 STAN. L. REV. 1215, 1263 (1993) ("While it may be counterintuitive, stable monopolists may price more flexibly than almost-competitive sellers. Monopolists need not worry about destabilizing tacit rent-extracting agreements and are certain to absorb the entire force of any demand shock. Thus, they might quickly realign prices after such a shock to maximize revenues.").

capital expenditures by oil companies across the world in response to the price rout should—eventually—reduce the supply glut and enable a price recovery.\textsuperscript{107} It appears more generally that we are witnessing the new foundation being laid for a systemically different oil market.\textsuperscript{108}

In fact, a recent report surfaced challenging long-held beliefs of proven reserves held by various countries throughout the world.\textsuperscript{109} The Rystad Energy Report posits that the lack of uniformity in accounting measures has resulted in greatly skewed data across oil producing countries.\textsuperscript{110} Some analysts have taken particular aim at the veracity of the Saudi Kingdom's self-reporting of reserves.\textsuperscript{111} Additionally, a recent announcement that Saudi Arabia intends to offer five percent of Saudi Aramco—the state run energy company—to investors through an initial public offering as part of a long-term economic blueprint,\textsuperscript{112} has drawn skepticism.\textsuperscript{113} Regardless of the validity of any of these statements or


\textsuperscript{108.} See Anna Driver, \textit{Oil Companies Slash Spending, Jobs as Prices Slide for Second Time}, Reuters (July 30, 2015, 02:32 PM), http://www.reuters.com/article/2015/07/30/us-oil-results-idUSKCN0Q42GD20150730#OsMoXAhj9CmGym.

\textsuperscript{109.} See Nick Cunningham, \textit{U.S. Has World's Largest Oil Reserves}, Yahoo! Finance (July 5, 2016), http://finance.yahoo.com/news/u-world-largest-oil-reserves-214600980.html ("Rystad estimates that the U.S. holds 264 billion barrels of oil, more than half of which is located in shale. That total exceeds the 256 billion barrels found in Russia, and the 212 billion barrels located in Saudi Arabia.").

\textsuperscript{110.} See id.

\textsuperscript{111.} John Kemp, \textit{Saudi Arabia's Oil Reserves: How Big are They Really?}, UK Reuters (July 5, 2016, 04:30 PM), http://uk.reuters.com/article/saudi-oil-kemp-idUKL8N19R3LR ("Official reserves have remained constant every year since then at 260-265 billion barrels, even as the country has consumed or exported another 94 billion barrels ('Statistical Review of World Energy', BP, 2016). If the government data is accurate, the kingdom has managed the remarkable feat of exactly replacing each produced barrel with new discoveries or increased estimates of the amount recoverable from existing fields.").


\textsuperscript{113.} See Rick Newman, \textit{The Saudis May Know Something About Oil the Rest of Us Don't}, (May 2, 2016), http://finance.yahoo.com/news/the-saudis-may-know-something-about-oil-the-rest-of-us-don-t-182413782.html ("So it might be shrewder to consider a range of scenarios that could explain the Saudis' willingness to sell a stake in Aramco. Weatherley-White sees three: The Saudis might simply be making a modest effort to diversify and become less dependent on oil, which would be smart. Or they could be sitting on considerably less oil than the public thinks, and looking to sell while the rest of the world thinks the emperor is still wearing clothes. Or, finally, the Saudis may be running short of cash due to expensive wars with bordering states and the costly lifestyles of its royals, and looking to bolster its reserves, without explicitly [sic] saying so.").
claims, the important takeaway is simply the supreme lack of certainty that now exists regarding a number of previously "certain" beliefs.

It appears that technological innovation has finally managed to systemically change how we think about and understand this unique commodity. Just as numerous other industries have been forced to confront the effects of technology on previous practices, it appears the oil industry may finally be forced to acknowledge the systemic repercussions of the Shale Revolution. Tim Mullaney brilliantly analogized this new oil market to the oft cited effects of the technology company Amazon, "[t]hink of the Saudi welfare state as oil's brick-and-mortar stores: integral to an old business model, unsustainable in the new."

III. THE ENERGY CHARTER TREATY: AN UNINTENDED SOLUTION?

Neither OPEC nor the IEA are capable of adapting to recent market developments. Instead, I intend to make the case that the Energy Charter Treaty (ECT) is the international organization best suited to deal with the unprecedented territory of the oil market today. Having previously considered the numerous market headwinds in Section II of this Note, Part III will examine the ECT's origination, content, and successes since its implementation.

A. ECT Lead-up and Development

As the first section of this Note discussed, both the WTO and various GATT agreements suffer from the fact that the rules and mandates contained within those agreements were promulgated without any specific discussion of energy issues and did not include "many of the most important energy exporters such as Indonesia, Nigeria, Kuwait, Venezuela, Qatar, the United Arab Emirates and, most notably, Saudi Arabia." Because OPEC members were excluded from preliminary discussions, any hope of these agreements influencing


115. See Mullaney, supra note 57.

and regulating the oil markets was moot from the start. In fact, only one section from the original GATT agreement can even be tenuously applied to oil,117 and when applied, a report from 2004 authored by U.S. Senator Frank Lautenberg found that OPEC members were in violation through the use of “OPEC-mandated oil production quotas.”118

The Lautenberg Report, however, failed to acknowledge the loophole that exists between the two different physical states of oil. As scholar Stephen Broome points out, “it is important to recognize the distinction between oil in commerce (i.e., oil extracted and stored in a manner suitable for transportation to the market) and oil in its natural state (i.e., oil still in the ground).”119 Although this may seem to be a rather technical distinction, “oil in its natural state has not gone through a production process, is not part of inventory, and so is not properly characterized as a “product” within the meaning of Article XI.”120 Through the exploitation of this imprecise drafting, “it follows that only after an OPEC member has produced oil for consumption could it violate Article XI.”121

This impasse persisted for decades without a satisfactory answer. OPEC members were beyond the reach of existing regulation and had zero incentive to comply with importers. Then, with the end of the Cold War and dissolution of the Soviet Union as an impetus, Dutch Prime Minister Ruud Lubbers proposed the formation of a European Energy Community in June 1990.122 This suggestion was made out of strategic necessity. Western Europe is without appreciable oil reserves while Eastern Europe and other countries that comprised the Soviet Union contain substantial reserves within their borders.123

What began as a simple politically strategic suggestion quickly developed into the 1991 Energy Charter, a document that, at first glance, appeared to have no more force than the NGOs that preceded it.

117. See General Agreement on Tariffs and Trade, art. XI, Oct. 30, 1947, 61 Stat. A-11, 55 U.N.T.S. 194 [hereinafter GATT] (“No prohibitions or restrictions other than duties, taxes or other charges, whether made effective through quotas, import or export licences or other measures, shall be instituted or maintained by any contracting party . . . “).
119. Id. at 416.
120. Id.
121. Id. at 416–17.
The charter was "a concise expression of the principles that should underpin international energy cooperation, based on a shared interest in secure energy supply and sustainable economic development."124 While idealistically sound, this charter served no more practical purpose than the IEA, other than being supported by a far broader base of members.125

Ultimately, the most important legacy of the 1991 Energy Charter is as a stepping stone to the Energy Charter Treaty signed in December 1994 and entered into legal force on April 16, 1998.126 With the preliminary proclamations of the 1991 Energy Charter well received, those same signatories endeavored to address the gap in relations between importers and exporters. Negotiations acknowledged that "in a world of increasing interdependence between net exporters of energy and net importers, it is widely recognised that multilateral rules can provide a more balanced and efficient framework for international cooperation than is offered by bilateral agreements alone or by non-legislative instruments."127

B. Energy Charter Treaty Provisions and Claimed Purpose

In drafting this Treaty, it is clear that negotiators were cognizant of the stalemate that dominated the market for the previous two decades. Too strong a stance against coordinated production would jeopardize the possibility of OPEC members even taking a seat at the table; while idealistic glosses and imprecise proclamations would immediately negate any practical power. What was eventually drafted and agreed upon by the fifty-four original members struck a balance that represented

a political commitment to cooperation in the energy sector based on some key principles: the establishment of market conditions that will stimulate private investments; the respect for state sovereignty over natural resources; the application of the principle of non-

125. Membership included not only net-importers but was significantly strengthened by the presence of Eurasian countries with proven reserves such as Azerbaijan, Kazakhstan, Kyrgyzstan, the Russian Federation, Tajikistan, Turkey, and Yemen. See id.
discrimination among participants; and the recognition of the importance of environmental sustainability.\textsuperscript{128}

The membership of the ECT and its provision for observer status quite possibly represents one of its greatest successes. While the majority of signatories to the Charter are composed of countries from Europe, the ECT "also provides for observer status, and twenty-four states participate on that basis including the United States, China, Saudi Arabia, Iran, Venezuela, Tunisia, United Arab Emirates, many other Persian Gulf states, and international organizations like the World Bank and the Association of Southeast Asian Nations."\textsuperscript{129} For the first time ever, an organization focused specifically on oil had exporters and importers sitting at the same table. Furthermore, as Article 2 of the treaty states, the ECT was concerned with more than just the rudimentary defensive issues identified by the IEA and instead sought to "establish a legal framework in order to promote long term cooperation in the energy field."\textsuperscript{130}

As scholar Theocharis Grigoriadis parses out, the ECT's uniqueness is underscored by its twofold nature as "a multilateral investment agreement in its premises and a global administrative law mechanism in its redistributive effects."\textsuperscript{131} The regulation of investment, as alluded to by Grigoriadis, is extensively examined in the following section, as this feature is by far the single greatest success of the ECT to date. At this moment, a brief review of pertinent ECT provisions will underscore the utility of the document as a whole.

Article 1, Definitions, seeks to address the technical gap—discussed earlier regarding Article XI of the 1948 GATT—between oil in the ground and oil which has entered the stream of commerce. The ECT, through Article 26, provides protection for qualified investments associated with "Economic Activity in the Energy Sector."\textsuperscript{132} Article 1 "broadly defines Economic Activity in the Energy Sector as economic activity concerning the 'exploration, extraction, refining, production, storage, land transport, transmission, distribution, trade, marketing or sale' of energy materials and products."\textsuperscript{133} This comprehensive definition ensures that members to a contract cannot circumvent ECT mandates

\textsuperscript{128} Leal-Arcas et al., \textit{supra} note 38, at 58.
\textsuperscript{129} Sussman, \textit{supra} note 41, at 954.
\textsuperscript{130} ECT, \textit{supra} note 126, art. 2.
\textsuperscript{132} ECT, \textit{supra} note 126, art. 1, 26.
through exploitation of the same loophole identified in the 1948 GATT, as this definition encompasses all steps of oil production.

Additionally, Article 26, Settlement of Disputes between an Investor and a Contracting Party, and Article 27, Settlement of Disputes between Contracting Parties, provide for “unconditional consent to the submission of a dispute to international arbitration.” Article 26 further provides that “awards of arbitration, which may include an award of interest, shall be final and binding upon the parties to the dispute.”

While Article 26 provides for a final backstop of international arbitration, it does not completely subsume the parties’ abilities to contract freely as investors are given three broad options to resolve disputes, including: “(1) the courts or administrative tribunals of the respondent state; (2) a previously agreed dispute settlement procedure, which is usually defined in a contract or concession agreement; or (3) international arbitration.” In this capacity, Article 26 acts as safety assurance for investors if either party does not honor the contract provisions.

Proceeding to Grigoriadis’s second point of characterizing the ECT as a “global administrative law mechanism,” a transition to examining the Treaty’s administratively focused provisions will exemplify why the ECT is best suited for governing today’s unprecedented developments within the industry.

Beginning with Article 6, arguably the most inflammatory section from OPEC members’ perspective, the provision provides pronouncements regarding competition. While the article begins with a call for contracting parties to “work to alleviate market distortions and barriers to competition,” it does later acknowledge “contracting parties may co-operate in the enforcement of their competition rules by consulting and exchanging information.” The basic thrust of this provision clearly takes aim at the OPEC monopoly but does acknowledge the necessity of market coordination. This Article does

134. ECT, supra note 126, art. 26.
135. Id.
136. Parish & Rosenberg, supra note 133, at 196.
137. Grigoriadis, supra note 131, at 47.
138. ECT, supra note 126, art. 6.
139. Id.
140. This provision is of the utmost relevance today as it appears that OPEC’s market share is facing exterior forces beyond its control. See DiChristopher & Schoen, supra note 86.
not make the practices of OPEC outright illegal, but instead simply provides for an avenue of discussion between contracting parties.\textsuperscript{141}

Article 18 represents a novel and important statement regarding a country’s sovereignty over energy resources. This measure is attractive from an individual country’s perspective as it seeks to prevent multinational corporations from gaining excessive power—an unfortunate reality of the past. Specifically, the Article provides that “contracting parties recognize state sovereignty and sovereign rights over energy resources. They reaffirm that these must be exercised in accordance with and subject to the rules of international law.”\textsuperscript{142} This Article, proceeding into the future, provides important protection and an incentive for countries to join the ECT, most notably, countries that have yet to discover or adequately develop oil reserves.

\textit{C. Energy Charter Treaty Successes}

By far the single greatest accomplishment of the ECT was a direct result of dispute resolution provisions previously discussed.\textsuperscript{143} These provisions “provide the ‘teeth’ that can serve to assure investors that their investments will be protected with respect to the measures specified in the ECT.”\textsuperscript{144} The most studied and lauded example on this topic is the Yukos Dispute.

The Yukos Oil Company became a publicly-traded joint stock corporation in 1995 after President Boris Yeltsin led a massive privatization effort in an attempt to liberalize the Russian economy in the hopes of moving the country toward a free-market economy.\textsuperscript{145} Purchased by Mikhail Khodorkovsky and a group of investors, Yukos quickly became the top oil producer in Russia and helped Khodorkovsky become Russia’s richest man by 2003.\textsuperscript{146} In 2003, Yukos averaged a

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\textsuperscript{141} See Grigoriadis, supra note 131, at 52 (“Policy discourse on energy antitrust is defined both in terms of state sovereignty (vertical constraint) and domestic energy business competition (horizontal constraint).”).
\textsuperscript{142} ECT, supra note 126, art. 18.
\textsuperscript{143} Additionally, provisions regarding rights against expropriation, when coupled with the ECT arbitration provisions, provide powerful assurances to investors that their rights will be protected. See Parish & Rosenberg, supra note 133, at 201 (“The ECT's rights are extensive, but in no sense unique. It accords investors the right not to have their investments expropriated; the right to so-called 'fair and equitable treatment'; and 'constant protection and security.' It also contains what are known as 'national treatment' and 'most favored nation' obligations. There is also a right of choice of 'key personnel.'”).
\textsuperscript{144} Sussman, supra note 41, at 956.
\textsuperscript{145} See Peter C. Laidlaw, Provisional Application of the Energy Charter as Seen in the Yukos Dispute, 52 Santa Clara L. Rev. 655, 666 (2012).
\textsuperscript{146} See id. at 667.
\end{flushleft}
daily output of more than 1.6 million barrels of oil and held over $18 billion in assets.\footnote{147}{Id.}

The Russian Federation’s second President, Vladimir Putin, quickly identified Yukos and Khordkovsky’s power and influence as a problem.\footnote{148}{See id.} Putin immediately espoused a concern over the growing power of a small contingent of independent businessmen, including Khodorkovsky and his cohorts, and began a process of “returning major energy sector companies to state control by harassing those involved with Yukos.”\footnote{149}{Id.} This was achieved through arresting high level company executives on various charges, including fraud and tax evasion.\footnote{150}{Id. at 667-68.} The Russian Ministry of Finance “made a series of tax assessments that would eventually total $27.5 billion, based on purportedly deficient tax payments from 2000 to 2004.”\footnote{151}{Id.} Finally, the Ministry of Justice announced an auction of Yugansksneftegaz (YNG), a Yukos subsidiary responsible for the bulk of oil production, to settle the reported deficiencies.\footnote{152}{Id. at 668.} Ultimately, a company called Baikalfinansgroup, “thought to be a front company and only recently registered in a grocery shop in a small Russian town, paid $9.4 billion for an asset that was valued at $60 billion by the London Stock Exchange, and between $14.7 billion and $21.1 billion by private financiers.”\footnote{153}{See id.}

After unsuccessfully exhausting other legal resources, Khodorkovsky, via a subsidiary, sent notice to Russia regarding the constructive expropriation of Yukos and sought arbitration under ECT mandate.\footnote{154}{See Laidlaw, supra note 145, at 670.} Arbitration proceeded in accordance with ECT provisions and, despite Russia’s best efforts to retroactively back out of the ECT after being an original signatory in 1994, the arbitration panel held that the ECT provisionally applied to Russia.\footnote{155}{See Yukos Universal Ltd. v. Russian Fed’n, 227 PCA Case Repository ¶ 134 (2009); Hulley Enters. Ltd. (Cyprus) v. Russian Fed’n, 226 PCA Case Repository ¶ 301 (2009) (“In the Tribunal’s opinion, by signing the ECT, the Russian Federation agreed that the Treaty as a whole would be applied provisionally pending its entry into force unless the principle of provisional application itself were inconsistent ‘with its constitution, laws or regulations.’”).}

For the purpose of this Note, the Yukos decision is discussed because of the significant international attention it received and for the
ultimate success of ECT investor protections.\textsuperscript{156} By upholding the various investor protections contained within the ECT, the international community—both investors and countries alike—took note of the ECT's effectiveness.\textsuperscript{157}

IV. WADING INTO UNCHARTED WATERS

In this new environment, there may finally be an incentive for cooperation among importers and exporters. While lower prices at the pump are indisputably favorable to consumers, macroeconomic forces may trump consumers short-term increased spending power. High debt loads among domestic oil producers and a resulting flurry of defaults could potentially have devastating effects on the U.S. and global economies.\textsuperscript{158}

Additionally, OPEC members could risk an Arab Spring-like future if social spending is continually cut in order to cope with a lower-price environment.\textsuperscript{159} Because neither of the aforementioned options is palatable to either group, it is becoming increasingly more likely that we will begin to witness an unprecedented era of collaboration among producers and consumers as a new equilibrium is established. Having discussed, at length, what makes the developments of the last decade unprecedented, it is now time to make the case for why the ECT is best suited to encourage cooperation as we enter a new and unknown world.

\textsuperscript{156} Alex M. Niebruegge, \textit{Provisional Application of the Energy Charter Treaty: The Yukos Arbitration and the Future Place of Provisional Application in International Law}, 8 CHI. J. INT'L L. 355, 372 (2007) ("Thus, the outcome of the Yukos Arbitration has the potential to directly impact not only future arbitration under the ECT but, more broadly, the status, characterization, and obligations imposed by provisional application in international law.").


\textsuperscript{158} Justine Underhill, \textit{Why Oil and Gas Companies are Barely Scraping By}, YAHOO! FINANCE (May 17, 2016) http://finance.yahoo.com/news/oil-debt-interest-payments-122155505.html ("The U.S. energy sector (XLE) is facing $370 billion of debt, a number that has more than doubled in the past decade... While $5.1 billion of U.S. energy debt matures this year, $25.1 billion will mature in 2017. The number rises [sic] to $52.5 billion in 2020.").

\textsuperscript{159} Angus McDowall & Celine Aswad, \textit{Expats, Employers Worried Over Uncertain Saudi Tax Proposal}, REUTERS (June 8, 2016 2:47 PM), http://uk.reuters.com/article/uk-saudi-plan-expats-idUKKCN0YU10O ("The collapse in oil prices after mid-2014 has pushed Saudi Arabia to contemplate a radical overhaul of all parts of its economy, including new taxes, privatisations, a changed investment strategy and sharp cuts in government spending.").
of twenty-first century oil. The ECT is in an advantageous position because of its noted bilateral success, broad base of membership, and pre-existing inclusion of provisions addressing relevant areas of concern.

First, the ECT has already achieved a number of commendable victories in line with the stated purpose of the organization. The resolution of the Yukos dispute provided firm support that the ECT was not just another powerless NGO. Additionally, because the charter was written with the sole purpose of governing a single industry, it is not weakened by general or ambiguous charter provisions. Furthermore, the ECT was not written in a one-sided manner; rather, the charter provides support for outside individual investors, importers, and exporters. This protection, especially for the developing nations with often little more than the oil reserves they seek to develop, is quite important. Additionally, other Articles discuss binding provisions that address key personnel, compensation for losses, and capital transfers.

Second, and perhaps most importantly, the ECT's preexisting broad base of membership makes it the perfect venue to be repurposed to force the cooperation necessary to proceed into this new oil era. The one-sided focus of both OPEC and the IEA has taken its toll. Neither organization is equipped to handle bilateral negotiations. Instead, both were formed primarily as defensive measures. In stark contrast, the ECT was formed with functional considerations that are represented in the bilateral membership of both importers and exporters. While countries like the U.S. and the majority of OPEC members only hold observer status, it is important to recognize that having these countries in the same room is an important first step. Simply put, observer status is better than no status.

160. Matteo M. Winkler, Arbitration Without Privity and Russian Oil: The Yukos Case Before the Houston Court, 27 U. Pa. J. INT'L ECON. L. 115, 147 (2006) ("Thanks to the ECT, Yukos is entitled to enjoy an unquestionable right to initiate arbitration that can be activated by the investor through a simple expression of consent to arbitrate the dispute.").

161. Saamir Elshihabi, The Difficulty Behind Securing Sector-Specific Investment Establishment Rights: The Case of the Energy Charter Treaty, 35 INT'L LAW. 137, 145 (2001) ("The ECT avoids the use of general language, and instead specifies the particular rights or prohibitions within the area described.").

162. ECT, supra note 126, art. 11.

163. Id. art. 12.

164. Id. art. 14.

165. See About, supra note 31; Hickel, supra note 24, at 107.

Furthermore, as earlier noted, the long-term viability of both OPEC and the IEA is increasingly being questioned within this new landscape. By definitional design, the IEA's most prominent member, the United States, may be technically excluded from membership. Additionally, the cornerstone of IEA policy—strategic petroleum reserves—has recently been acknowledged to be an outdated policy. Moreover, considering both the rapid technological advancements within the last two years and the existence of massive shale reserves outside of the United States, OPEC's functional purpose may be a relic of the past. The waning functionality of both of these groups has opened a void that the ECT must fill.

Finally, the ECT already contains a number of provisions that address, at least superficially, the present-day issues mentioned throughout this Note. While it is doubtful that the original negotiations and signatories could have predicted the technological developments that have altered the landscape today, many of the articles nonetheless seek to address these problems. Of particular importance are "substantive clauses in the ECT that include protections against trade-related investment measures," unfair competition, and restrictions on the transit of energy materials and products." More generally, the Charter's overall advocacy of global cooperation is an integral reason why the ECT is best suited to subsume the roles formerly served by unilaterally- and defensively-focused organizations.

CONCLUSION

The future of the oil industry is amidst a drastic transition and the past is of little support for the future. The ebb and flow of the market is

167. See Member Countries, supra note 33 (listing the United States as one of twenty-nine member countries).
169. ECT, supra note 126, art. 5; Elshihabi, supra note 161, at 145, n. 51 ("[A]rticle 5 provides foreign investors protection against government measures or domestic laws that force the investor to purchase a certain quantity of domestic goods, or restrain the investor's ability to import goods necessary for local production and use or export.").
170. ECT, supra note 126, art. 6; Elshihabi, supra note 161, at 145.
171. ECT, supra note 126, art. 7; Elshihabi, supra note 161, at 145.
172. See Sussman, supra note 41, at 954 ("The ECT was designed to meet the need for multilateral rules for international cooperation on investment protection, which is required by the increasing globalization of the world's economy, the interdependence of the energy sector, and the long-term and highly capital-intensive nature of energy projects.").
no longer tied to fundamentals,173 but is instead subject to news articles selling either boom or bust—sometimes on the same day.174 While many false bottoms have been called throughout this prolonged price rout,175 experts have been continually confounded by the current operation of the market.

While many may—and have—been tempted to make bold proclamations about the future of this industry, it should be abundantly clear at this point that those statements are little more than wishful thinking and conjecture. Unlike the past, the future trajectory of the oil market is no longer in the hands of a few. A cartel is only effective when there is a finite amount of a resource and the sheer majority is held within that cartel. Between Russia, U.S. shale production, and other sources yet to be tapped around the world, OPEC has simply lost control of the tight grip that once crippled the U.S. in 1973.

It may not be immediate—and certainly has not been so far—but I believe that the systemic changes that have already occurred and appear prime to continue developing will eventually force OPEC to recognize the archaic nature of its current regime. The sheer resilience of the U.S. Shale Gas industry has effectively rendered OPEC’s tactics meaningless. Despite the cartel’s best efforts, technology has profoundly disrupted this industry.

From the U.S. domestic perspective, the uncertainty and massive fluctuations in prices is nearly as untenable. While the U.S. is positioned slightly better than OPEC members, due to shale energy companies existing within the private sector, the possibilities of

173. Patti Domm, OPEC Comments Show Lost Relevance Ahead of Meeting, CNBC (Nov. 23, 2015 3:57 PM) http://www.cnbc.com/2015/11/23/opec-comments-show-lost-relevance-ahead-of-meeting.html (“Oil surged Monday on remarks from Saudi officials that the country is willing to work with oil producing and exporting countries, both inside and outside of OPEC to maintain market and price stability.”).


contagion within the larger global economy are just as serious. As previously discussed, overzealous lending to shale oil companies during the boom has created a serious looming debt bubble.

Rather than venturing to make the same frivolous statements and proclamations as so many others, this Note concludes by weighing the only tangible certainties available. First, the current price environment—subject to erratic peaks and troughs—is unsustainable. Second, members of OPEC are on the brink of collapse while any faltering in the U.S. economy could have dire effects upon an already stagnate and uncertain global economy. Third, there currently does not exist—nor has ever existed—a mechanism to regulate the most important global commodity. Finally, without such a mechanism in place, the new status quo will be that of uncertainty—an uncertainty that benefits no one.

I believe we are on the brink of a historic moment when, for the first time ever, importers and exporters are effectively forced to take a seat at the same table to combat the numerous uncertainties dominating the market today. Cooperation is the only sensible solution to such widespread and systemic change; and of the preexisting treaties and organizations, the ECT stands alone as an attempt to bridge the gap between producers and consumers. While one could certainly make the case for an entirely new treaty or organization, the need for immediate action at this point should be clear. Any further bureaucratic delay could be catastrophic for OPEC members, U.S. producers, and the entire global economy. The ECT stands ready to broker cooperation among longtime competitors and guide this uncertain market into a new era of clarity.


178. Laura Mills & Summer Said, Vladimir Putin Urges Oil-Producing Nations to Cap Production, WALL STREET J. (Sept. 2, 2016 10:54 AM), http://www.wsj.com/articles/vladimir-putin-urges-oil-producing-nations-to-cap-production-1472805749 (“I would very much like to hope that every participant of this market that's interested in maintaining stable and fair global energy prices will in the end make the necessary decision,’ Mr. Putin said.”).