Oil Price Basic Supply & Demand and Future Need

Yi ZHANG, Jie-xiang WANG and Chuan-ping ZHANG

University Petroleum of China, Yantai City, Shandong Province, China

Keywords: Crude Oil Price, Random Walk, Energy Evolving, Ruining.

Abstract. Crude oil price was collapsed since second half 2014, in oversupply world oil market; Among continuously evolved energy industry, and new industry ecologies characterized low carbon, the view that oil industry would be ruined, was arisen. With Brent oil price data on Augusts in 2017, global oil price motion was a Random Walk. The supply & demand of oil in global economic & social development was analyzed. The views that the difficult period of oil & gas industry was over, the future market of oil & gas was sufficient, the future demand of oil & gas was not ended up, was showed.

Introduction

Compared with the average price of Brent crude oil\(^1\) (the benchmark that’s most used in the world) which was $98.65/ barrel in 2014, crude oil price declined sharply since the second half of 2014; in 2015 the average price was $52.39/ barrel\(^2\); in January 22, 2016, the London Brent crude oil prices was fallen to $27.88/ barrel, which broke the lowest price since November 2003; in 2016 the average price was $43.73/ barrel\(^3\) due to a variety of reasons. The current Brent crude oil price statistics was shown in figure -1.

![Figure 1. The trend of Brent crude Price on Augusts 2017.](http://youjia.chemcp.com)

The global oil industry was suffered from low oil prices. Exxon corporation, the giant of the industry, firstly failed to replace the oil and natural gas reserves by means of the new discovery or the acquisition of reserves in 2015. (the proved reserves of the United States was stipulated by the Securities and Exchange Commission/SEC: only refers to the oil and gas reserves which would be capable of producing economically in the next 5 years); at the end of December, 2015, its reserves was equivalent to 24.8 billion barrels, reserve replacement ratio was 67% and the reserve production ratio is 16%; the net income of the corporation was $16.1 billion\(^4\), it was declined by 50% compared to 2014. Its performance was also unsatisfactory in 2016, in accordance with the rules of SEC, low oil prices made their oil sands investment and North America assets depreciated by $16 billion, equivalent to the “discovered” untapped reserves of 3.3 billion barrels, its profit was $7.84 billion\(^5\), 51% lower than the previous years. In 2016 Chevron, not only the new oil and gas reserves could not be achieved the whole replacement, but the company for the first time lost $497 million\(^6\) since 1980s. BP (Deep-water Horizon rig accident in Gulf of Mexico, resulted in BP’s financial losses of $61.6 billion\(^7\) ), from 2014 earned of $8.1 billion, was turned to loss of $5.2 billion which set a new record in 2015, leading to shareholders rejected the increasing of 20% of
CEO’s payment; in 2016, with all their efforts, abided by the ‘iron law’ of paying shareholder bonus, the profit was only $115 million. Asia's most profitable Corporation, PetroChina, in accordance with international financial reporting standards, was reported that in 2015 it attributed the parent company net profit of 355.17 billion yuan\(^9\), was declined by 66.9% from the year before, only was 1/3 of net profit earned in 2014, the lowest since listing; 2016 net profit was only 7.86 billion yuan ($1.1 billion)\(^10\). Sinopec released performance reports of 2015, showed that its net profit was 32.4 billion yuan, an annual decline of about 30.2%; in 2016, the shareholder bonus was only 0.17 yuan / share. According to CNOOC’s financial report, its net profit of 2015 was 20.25 billion yuan, which is an annual decline of 66.4%; in 2016 the shareholder bonus reached HK $0.23 / share.

The shocking scene in the field was that BP did layoffs, Chevron did layoffs, Shell did layoffs, Schlumberger did layoffs, Halliburton layoffs, Beck Hughes layoffs...... Hundred independent oil companies went bankrupt...... With low oil prices, the world oil industry reduced the cost, reconstructed business outlet, since the decline in oil prices, the oil & gas industry in the world (not included China) had more than 100 independent oil company be announced bankruptcy, oilfield service companies and drilling contractors as well as exploration and development company, had dismissed about 400000 jobs\(^11\).

Although the organization of Petroleum Exporting Countries (OPEC) have 13 members and 11 non OPEC alliance countries, in order to clear global oil supply surplus and reduce the stocks which was far higher than the average level of 5 years, they gave up the strategy of “With a low cost, forced high cost producers out and re-balanced the oil market” since the second half of 2014 prices went down; in November 2016, for the first time in eight years, they had achieved an output reduction agreement been effectiveness in January 2017; the agreement on reduction of output -- Saudi and OPEC reduced output by 1.2 million barrels / day; Russia and other oil producers alliance reduced 600 thousand barrels / day\(^12\) -- was for 6 months; to achieve the "expected purpose", Saudi Arabia and Russia also led the League decided to extend the validity of production reduction agreement to March 2018\(^13\). Even so, the current crude price was merely that was in the past shown in figure-1.

Compared to the previous an atmosphere, the depressed oil prices, the depressed environment of the industry, and the reconstructed industry ecology, some of arguments came out: The oil industry was on the fast track down; the oil industry was not reserve depleted, but need; oil industry was the last Carnival before the doomsday......and so on. About these views, this article discussed the argument from the basic aspects of oil and gas supply and demand.

**World Oil Price Trend**

The supply and demand of oil and gas, which was influenced by the development of world economy, the efficiency of energy, the carbon reduction dealt with climate change and new energy development, geopolitics, financial conditions of traditional oil exporting countries, US dollar exchange rate and international speculation, affected world oil price. Many institutions, scholars, and other professors in this filed have done a lot of research on world oil prices, but the complexity of the world oil background, uncontrolled changes made the research results disappointing and it was quite common. As Buffett said: "I have no idea how long-term oil prices will change." we have no intention and confidence to predict the future world oil price, we just assume everything was in a "random" environment and will observe the international oil price and take Brent crude oil price as an example from the aspect of mathematics.
The recent statistics of Brent crude oil prices are shown in table 1. We have time series econometric techniques describe “Brent crude oil price time series”. First, the “Brent crude oil price time series” was tested an unsteady or stable stochastic process. So, the root of unity was checked and the results was shown in figure 2.

### Table 1. The Statistics of Brent Crude Price on Augusts 2017.

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>$/barrel</td>
<td>51.78</td>
<td>52.26</td>
<td>52.01</td>
<td>52.42</td>
<td>52.37</td>
<td>52.70</td>
<td>51.90</td>
<td>52.10</td>
<td>50.72</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>$/barrel</td>
<td>50.80</td>
<td>50.27</td>
<td>51.02</td>
<td>52.72</td>
<td>51.66</td>
<td>51.87</td>
<td>52.57</td>
<td>52.04</td>
<td>52.41</td>
<td>51.89</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Date</th>
<th>8/29/2017</th>
<th>8/30/2017</th>
<th>8/31/2017</th>
<th>9/1/2017</th>
</tr>
</thead>
<tbody>
<tr>
<td>$/barrel</td>
<td>52.00</td>
<td>50.86</td>
<td>52.28</td>
<td>52.75</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>52.22</td>
</tr>
</tbody>
</table>

©http://youjia.chemcp.com

Figure 2. The Result of Unit Root in Brent Crude Time Series.

As was shown from Figure 1, the $t$ test statistic value is -3.0966, less than the (left) critical value of the significant levels—5% and 10%. Therefore, the original hypothesis was rejected, and the sequence has not the root of unity. It was concluded that the time series of Brent crude oil price in Figure 1 was a stable stochastic process and its auto-correlation and partial correlation were shown in Figure 3.

Equation (1) showed that the development of world economy, the efficiency of energy, the carbon reduction dealt with climate change and new energy development, geopolitics, financial conditions of traditional oil exporting countries, U.S dollar exchange rate and international speculation, especially the change of output of Restraining Production Alliance led by OPEC and Russia, the mighty changes of United States crude oil production of shale, and the stock fluctuation ranges above the average level of five years, all affected the crude price. Therefore, the crude oil price fluctuation is normal.

$$p_{t+1} = p_t + \epsilon_t, \quad \epsilon_t \sim N(0,1)$$

(1)
The World's Oil Consumption and Demand

It's an undoubted fact that oil is an non-renewable resource which distributes unevenly in different countries. The theory of "Organism Generation Theory" was related to the acknowledge of oil's "scarcity" (the relationship between "scarcity" and price was indeed a common sense of economics). The research on oil production peak based on "Organic Generation Theory" was not only a hot topic for scholars and experts in this field, people's subconscious has also pushed up oil prices. In 1956, Marion King Habert, the oil geophysicist in the University of Chicago, published a paper entitled oil peak at the annual meeting of the American Petroleum Institute. In this paper, he claimed that the largest oil reserves of the United States wouldn’t be surpass 200 billion barrels, and 1970 would be the benchmark year for its oil peak. In addition, the ultimate global oil reserve would be 1.25 trillion barrels. However, in 1989, Harbert said in an interview before his death that "The method that I used to estimate the US oil reserves didn't have any scientific basis, which was just like measuring the wind speed with a finger. What 'they' asked me to do was estimating the oil's maximum reserves... I know I have no choice but to draw the oil peak curve, and also need to make everyone be convinced of that. This was the truth. All of the relevant curves were imagined. I just made an estimation. If you think the value is too high, then draw the curve lower, and vice visa.” It can be seen that the oil peak theory was just a whopper that Harbert sprinkled to all over the world for money. Let’s just put the 'peak oil' lies aside, the problems about the world's resources, food, population, and environment, which were proposed in "Roman Declaration" in 1980s, were deeply rooted in people’s hearts. Owing to it, sustainable development has become a consensus which guides us to concern about our only existing earth, care about our common home. And the consensus was deeply rooted in people’s hearts, and ‘low carbon and renewable resources’ represents the trend of energy development. But it’s also as the Professor Smile said, who is the author of the mythology and reality of energy, “History showed that energy systems have a strong intrinsic inertia as the most complex, capital-intensive and massive infrastructure in modern society. Our decision can accelerate the transformation of the energy system, but it can’t change the natural properties of energy development fundamentally.” In the past 10 years, the global energy demand grew by 1% consecutively for three years, which was half of the average growth rate over the past decade. While in 2016, the global oil consumption rose 1.6%, which is 1.6 million barrels / day, and the growth had been higher than the average growth rate of past 10 years for current two years consecutively (mainly including: India 300 thousand barrels / day, the EU 300 thousand barrels / day, China 400 thousand barrels /day). Global oil consumption demand can be seen in Table 2.

Table 2. The Statistics of World oil consumptions(100million tons).

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>World oil consumption</td>
<td>37.2</td>
<td>38.6</td>
<td>39.1</td>
<td>39.5</td>
<td>40.1</td>
<td>40.0</td>
<td>39.2</td>
<td>40.4</td>
<td>40.8</td>
<td>41.3</td>
<td>41.8</td>
<td>42.5</td>
<td>43.4</td>
<td>44.1</td>
</tr>
<tr>
<td>OECD(32)</td>
<td>22.4</td>
<td>22.9</td>
<td>23.0</td>
<td>22.9</td>
<td>22.7</td>
<td>22.1</td>
<td>20.9</td>
<td>21.1</td>
<td>20.9</td>
<td>20.7</td>
<td>20.5</td>
<td>20.5</td>
<td>20.6</td>
<td>20.8</td>
</tr>
<tr>
<td>NON-OEC</td>
<td>14.7</td>
<td>15.7</td>
<td>16.1</td>
<td>16.6</td>
<td>17.4</td>
<td>17.8</td>
<td>18.2</td>
<td>19.2</td>
<td>19.9</td>
<td>20.6</td>
<td>21.2</td>
<td>22.1</td>
<td>22.7</td>
<td>23.3</td>
</tr>
<tr>
<td>D</td>
<td>6</td>
<td>6</td>
<td>3</td>
<td>7</td>
<td>0</td>
<td>9</td>
<td>5</td>
<td>1</td>
<td>6</td>
<td>5</td>
<td>8</td>
<td>8</td>
<td>1</td>
<td></td>
</tr>
</tbody>
</table>

© Sort according to BP report

The study [18] pointed out that the world's oil demand increased by 0.9% before 2035(OPEC hopes to meet the global supply from the present 35% to 70% in the future, and the rest can be met by the United States and Russia), and the peak oil demand will appear in 2035. In 2035, the peak demand will reach 5.285 billion tons, increased by 867 million tons absolutely compared with 2016. It must be pointed out that it just reached the peak of oil demand (no longer to grow) in 2035, but nobody knows when the demand will run out. Natural gas demand would be growing at the speed of 1.6% per year, and shale gas is forecasted to grow by 5.2% annually and provide 60% of global gas supply growth, gas demand peak won’t appear between 2035 and 2050.

We can’t deny that automobile’s “substitute product” which is represented by the electric automobile will have a great impact on the demand for oil fuel. It’s reported that in August 2015,
the United States California Air Resources Committee Chairman Mary Nichols said that California may prohibit the sale of traditional fuel automobile in 2030. In April 2016, the Dutch Labor Party (Laborprod) made a public proposal to ban the sale of traditional gasoline and diesel vehicles in the Netherlands since 2025, which aims to ensure that all of the new cars are powered by new energy ever since. In May 2016, Norway's four major political parties agreed to ban fuel sales from 2025 (not the final decision). In October 2016, the German Federal Senate passed the proposal with high votes to ban the traditional internal combustion engine car since 2030, and the Senate suggested that German legislators should urge the other EU member states to accept the proposal that is only zero-emission vehicles are allowed after 2030. In July 2017, French energy minister Nicolas Hulot said that in order to achieve the objectives of the Paris Agreement, France plans to stop selling gasoline and diesel vehicles in 2040. In July 2017, the British government announced that Britain will ban selling gasoline and diesel vehicles comprehensively since 2040 when the market will only allow new energy and environmentally friendly vehicles sells, such as electric vehicles. According to the plan published by the UK Department of Environment, Food and Rural Affairs to solve the road’s pollution, the UK government will ensure that there will not be gasoline and diesel vehicles traveling on the road any more in 2050. China has ranked first for eight years consecutively in car’s sales, and the selling amount even exceeded 28 million in 2016. To accelerate the automotive industry to move towards the direction of intellectualization and motorization, seize the new opportunity of high ground and catch up to the industry developing trends and opportunities, China’s Ministry of Industry Information has started to research on making the fuel vehicles’s lockout schedule.

However, we must be clear that oil is not only used as fuel for automobile! This century’s specific oil consumption structure and foreground are shown in Figure 4.

![Figure 4. Global Crude Consumption Structure.](image)

It can be seen from Figure 4 that the oil consumption used as automobile fuel was less than 40% of the total oil consumption all over the world before 2020. Even if we assumed that the percentage could reach 40% in 2035, the oil industry 'may' lose 2.1 billion tons fuel consumption of the market, but it still retains 3.2 billion tons of the market. In addition, because of electric vehicles’ replacement of fuel vehicles, the demand for electricity will increase too. We assume that 1 ton of oil = 40 million Btu, 1 kWh of electricity= 3412 Btu. So in theory, 2.1 billion tons of oil = $21 \times 10^8 \times 40 \times 10^6 / 3412 = 25 \times 10^{12}$ kWh. Because of the trend of carbon reduction, we also assume that the electric car’s increased electricity demand is all powered by natural gas, then new natural gas
demand is $21 \times 10^8 \times 1111 = 2.333 \times 10^{12}$ cubic meters theoretically. It’s essential for us to know that this is equivalent to 66% of the 2016 global natural gas production--3.55 trillion cubic meters. It is no wonder that at the Portuguese oil conference in June, Total CEO Zooyang said that they would no longer be called oil and natural gas companies in the future 20 years, but natural gas and oil companies. Furthermore who can predict how much oil non-fuel demand will derive from petrochemicals in its future development.

In a word, the thing that never changes in the world is change. No matter now or the “foreseeable” future, can’t it be said the ‘will soon decline, the demand exhausted. Studies with prejudice can only be the dark side of our horizons.

The World Oil Production and Supply

The price was decided by the buyer (demand) and the seller (supply). Global oil production statistics are shown in Table 3:

### Table 3. The Statistics of Global Oil Production(Billion tons).

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>OPEC</td>
<td>1.507</td>
<td>1.646</td>
<td>1.694</td>
<td>1.708</td>
<td>1.689</td>
<td>1.746</td>
<td>1.622</td>
<td>1.667</td>
<td>1.704</td>
<td>1.776</td>
<td>1.74</td>
<td>1.73</td>
<td>1.803</td>
<td>1.864</td>
</tr>
<tr>
<td>NON-OPEC</td>
<td>1.712</td>
<td>1.701</td>
<td>1.672</td>
<td>1.655</td>
<td>1.637</td>
<td>1.615</td>
<td>1.617</td>
<td>1.647</td>
<td>1.64</td>
<td>1.67</td>
<td>1.711</td>
<td>1.814</td>
<td>2.562</td>
<td>2.518</td>
</tr>
</tbody>
</table>

©Sorted according to BP report

It can be seen from Table 2 and table 3, an oversupply of the world’s oil has obviously appeared. In an oversupplied market, price decline is a common sense in economics.

Booming the U.S. Shale Oil and Changed Global Consumption Patterns

The prosperity of the U.S. shale leaded to a sharply decline of oil prices from the middle of 2014(over $100.00/ barrel), which was also be the industry consensus. The U.S. oil production and consumption structure in recent year were shown in Table 4.

### Table 4. The List of Oil Production & Consumption of U.S. (Million tons).

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Production</td>
<td>302.3</td>
<td>322.5</td>
<td>332.8</td>
<td>345</td>
<td>393.7</td>
<td>448</td>
<td>522.8</td>
<td>567.2</td>
<td>543.0</td>
</tr>
<tr>
<td>Absolute increment</td>
<td>——</td>
<td>20.2</td>
<td>10.3</td>
<td>12.2</td>
<td>48.7</td>
<td>54.3</td>
<td>74.8</td>
<td>44.4</td>
<td>-24.2</td>
</tr>
<tr>
<td>Consumption</td>
<td>875.4</td>
<td>833.2</td>
<td>850.1</td>
<td>834.9</td>
<td>817</td>
<td>832.1</td>
<td>838.1</td>
<td>851.6</td>
<td>863.1</td>
</tr>
<tr>
<td>Absolute increment</td>
<td>——</td>
<td>-42.2</td>
<td>16.9</td>
<td>-15.2</td>
<td>-17.9</td>
<td>15.1</td>
<td>6.0</td>
<td>13.5</td>
<td>11.5</td>
</tr>
<tr>
<td>Import</td>
<td>573.1</td>
<td>510.7</td>
<td>517.3</td>
<td>489.9</td>
<td>423.3</td>
<td>384.1</td>
<td>315.3</td>
<td>284.4</td>
<td>320.1</td>
</tr>
</tbody>
</table>

From Table 4, in a certain sense, any increment of U.S. oil production will mean a “surplus” to the global petroleum market, if the other supply-demand condition was not changed. Further analysis also showed that such surplus mainly depends on shale oil. The Fossil Fuels Office of DOE contributed to the success of the development of U.S. shale oil. Early In 1975, the first vertical well used for shale gas exploration, which had been drilled by this office in Appalachian Basin. In the following 20 years, $ 137 million was invested to demonstrate and commercialize today’s shale drilling technology. Even up to now, the innovations of this office’s shale technology are available to any company, including those who keep their own research results. Its contribution as the US industry said: If there is no DOE, there must be no shale revolution [21]. So far, according to the United States EIA statistics, the production of shale oil rise to new quantities. Texas’ and New Mexico’s Permian Basin will increase 64,000 barrels per day in September, reaching to 2.6 million barrels per day; the eagle beach is expected to reach to 1.39 million barrels per day in September; it reaches to 1.05 million barrels per day in Becken area, Anadarko New District will reach to 459
thousand barrels per day. All the shale oil production (5.5 million barrels per day) equals half of U.S. oil production. The "shale revolution" of the United States has subverted the old "resource country - producer - consumer" of the world’s oil pattern and the hidden discipline of "world oil model" under the old pattern.

The Strategy’s Paradox & Poor Implementation and Embarrassed Oil Prices

At the beginning of the decline of oil prices, Saudi Arabia gave up its role of "swing producer of the balance market". At the OPEC Ministerial Conference in December 2014, under the lobbying domination of Saudi Arabia, Kuwait, Iraq, the United Arab Emirates etc, the strategy of “Defense of market share” was put forward. Ali Al-Naimi, former Saudi oil minister, directly stated their plans: "When these U.S. high-cost producers of shale companies are driven out of the market, oil prices will recover"[17]. In particular, that impressed the U.S. oil industry was: the oil industry celebrities who struggled with the worst drop in oil prices in a century met at Houston in 2015, the Saudi energy minister Ali said to them: “Cost reduction, incur debt or liquidation”! Saudi Arabia (with 2.2 million barrels per day of production reserves) increased its production to the highest level of 10.10 million barrels per day, and in April reached and maintained at 10.30 million barrels per day in 2015; Iran's output was increased after lifting sanctions, Iraq’s output increased, Nigeria, Libya increased their productions after the turmoil..... Consequently, on January 20, 2016, crude oil prices of London Brent fell to $27.88/bbl. As is well-known, low oil prices was double-edged sword, when oil price in the Middle East and North Africa was below $50/bbl，Kuwait was the only country which can achieve the national fiscal balance[22]. Then Algeria put forward a motion in April 2016, making an initial agreement in September 2016, and formally implemented in January 2017: Saudi Arabia and relevant member countries of OPEC would reduce 1.2 million barrels per day; Russia and other coalition countries cut output of 600 thousand barrels per day.

A significant footnote to the current embarrassed oil prices was that the total volume of commercial oil stock in the 32 OECD countries was risen to 2.98 billion barrels, from the 2.88 billion barrels per year, more than the average data of five years 286 million barrels, Before the reduction agreement came into effect. The oil tankers from OPEC has made its stock climb up to 3.06 billion barrels in January 2016, more than 330 million barrels to the average data in five years, which brought a huge barrier to the oil price rise.[23] On the other hand, the implementation of the reduction agreement was also unsatisfactory. As Ali said, that “we often deceive” (on the agreement). The current Saudi oil minister, Khalid Al-Falih, said pressure must be pushed on countries that fail to comply with production cuts, including monitor exports. After all, the total compliance rate in June 2017 was only 92%. Although Saudi Arabia took the lead, the cut production exceeded its commitment (480 thousand barrels per day) of 1/5. But Iraq, as the second largest producer of OPEC, only to fulfill 46% of 210 thousand barrels per day as its commitment ; the fourth largest producer ,UAE ,reached 54% of its commitment to reduce 139 thousand barrels per day[24]. The affluent Kuwait ,only achieved 98% of its commitment to reduce the 131 thousand barrels per day.

Conclusion

The Most Difficult Period of the World's Oil Industry Is Over

Since OPEC's implementation of clearing global oversupply strategy, analysts from Goldman Sachs to Bank of America have been saying that the key indicator of this strategy is backwradation which indicates a balance between supply and demand or demand exceeds supply. This year in August, Brent oil prices had kept in a stabilized situation at more than $50/bbl, and U.S. crude oil inventories were shrunk continuously, all these indicated that OPEC's action was finally effective. Brent contract oil prices in August is higher than the contract price in September, in October Brent futures prices is 53.49 US dollars per barrel, which is 18 points higher than it in November; and there is a backwardation in November compared with December ... ...which indicates that the most difficult period of world's oil industry is over.
The Future World Oil Market Is Loose Market

Looking at the world's oil industry, the most noteworthy fact is that the future of the world's oil industry is into the era of sufficient supply, the price will not be too high to become the new normal ("Lower for longer is the new normal"). As B.P. President Dudley said, BP has a full list of projects under the oversupply background. The oversupply is also based on the abundant resources: only unconventional oil resources’ technical reserves has already reached 0.5 to 2 trillion barrels as the U.S. Permian Basin reported, while the outcrop of the powder river basin (Wyoming) technical reserves are doubled than Permian Basin. The deepening of the carbon reduction and the continuous reconstruction of the primary energy structure, technological progress to promote the improvement of energy efficiency and the global reconstruction of industrial ecology won’t make the oil demand shrink or over-expanded, after all, developed countries have already met the peak of oil demand in 2005, the global energy economic focus has been changed, the demand and trade have been shifted from the Atlantic basin to the Pacific, and of course, the focus of energy strategy security have also went eastward.

The Oil Industry Is Beyond Exhausted

Oil prices collapsed, the initial energy structure is continuously reconstructed, leading to all kinds of the oil industry’ catastrophe argument appeared, and panicked the industry practitioners about its future. However, the oil industry is high-tech industry, it is capable of fighting for their development space with the background of fast-changing economical efficiency of renewable energy and surviving from the constantly energy restructure process.

References


236


