Petroleum refining processes are the chemical engineering processes and other facilities used in petroleum refineries (also referred to as oil refineries) to transform crude oil into useful products such as liquefied petroleum gas (LPG), gasoline or petrol, kerosene, jet fuel, diesel oil and fuel oils. Petroleum refineries are very large industrial complexes that involve many different processing units and auxiliary facilities such as utility units and storage tanks. Each refinery has its own unique arrangement and combination of refining processes largely determined by the refinery location, desired products and economic considerations. There are most probably no two refineries that are identical in every respect. Some modern petroleum refineries process as much as 800,000 to 900,000 barrels (127,000 to 143,000 cubic meters) per day of crude oil.

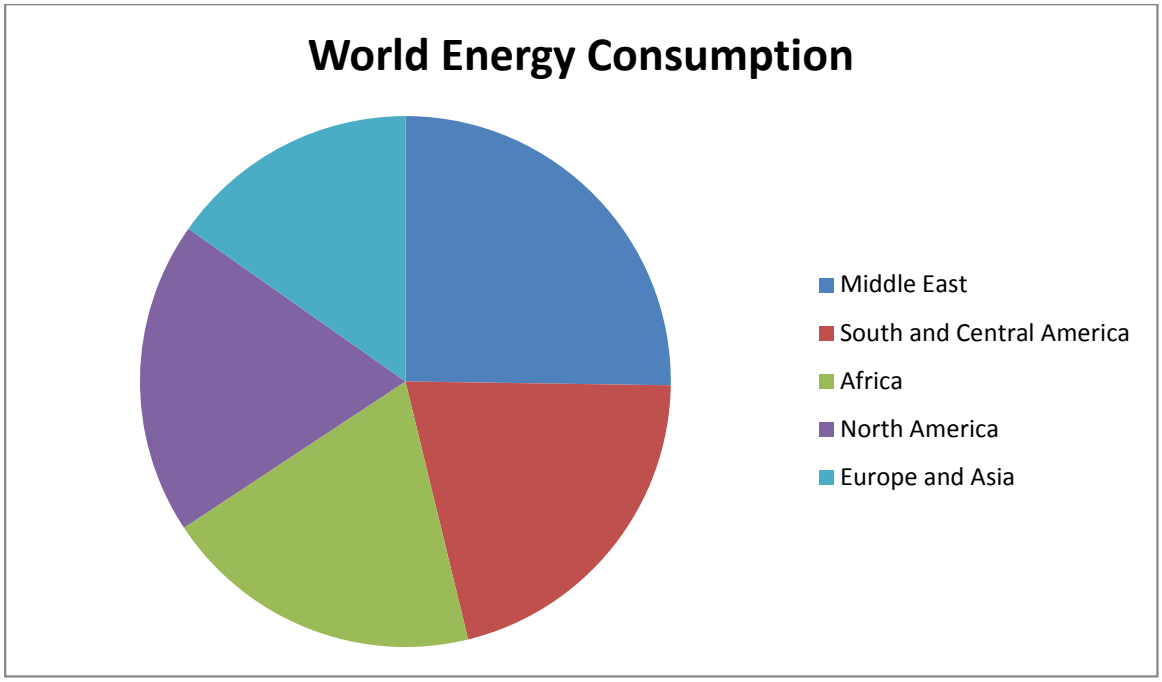
Petroleum engineering is ideally the science of exploration and extraction of petroleum based hydrocarbons like crude oil, natural gas and other energy forms from the earth for economic purposes. Petroleum engineering can only be undertaken through the design, drilling and successful operation of the wells and their systems.

Petroleum and Refinery Market analysis

The petroleum industry includes the global processes of exploration, extraction, refining, transporting (often by oil tankers and pipelines), and marketing petroleum products. The largest volume products of the industry are fuel oil and gasoline (petrol). Petroleum (oil) is also the raw material for many chemical products, including pharmaceuticals, solvents, fertilizers, pesticides, and plastics. The industry is usually divided into three major components: upstream, midstream and downstream. Midstream operations are usually included in the downstream category.

Petroleum is vital to many industries, and is of importance to the maintenance of industrial civilization in its current configuration, and thus is a critical concern for many nations. Oil accounts for a large percentage of the world's energy consumption, ranging from a low of 32% for Europe and Asia, to a high of 53% for the Middle East.

Other geographic regions' consumption patterns are as follows: South and Central America (44%), Africa (41%), and North America (40%). The world consumes 30 billion barrels (4.8 km^3) of oil per year, with developed nations being the largest consumers. The United States consumed 25% of the oil produced in 2007. The production, distribution, refining, and retailing of petroleum taken as a whole represents the world's largest industry in terms of dollar value.



During the period of 2009-2014, the global petroleum market has generated about $5 trillion in revenue and has posted a strong growth of 11.9%. During the same period the U.S market generated $730 billion in revenue and has generated a growth of 7.6%. According to a survey the projected oil demand of Organization of the Petroleum Exporting Countries is expected to increase from 9.5 million barrel per day in 2015 to 11.9 million barrels per day in 2035.

Snapshot of Australian Petroleum Market:

Australia's local oil refineries constantly compete with imported petroleum products from large highly efficient refineries in Asia, regardless of the cost of importing and refining crude oil. Consequently, the price of petrol at Australian refineries is based on international petrol prices. If local prices were higher than international prices, imports of petrol would displace local production. The Australian refining sector is a price taker. Domestic prices are closely linked to relevant international prices. The Singapore benchmark price of petrol (MOPS95 Petrol) is the key price benchmark for petrol in Australia. MOPS95 Petrol plus shipping costs and Australian taxes represents almost the entire wholesale price of petrol (around 95%). According to APPEA, "Australia is a world leader in LNG innovation. The world's first coal seam gas-to-LNG projects are being developed in Queensland. Australia also seems likely to become the first country in the world to host a floating LNG project

Top 15 largest world oil companies by reserves and production are Saudi Aramco, NIOC, Qatar Petroleum, ExxonMobil, PetroChina, PDVSA, BP, ADNOC, Royal Dutch Shell, Pemex, NNPC, Chevron, NOC, Kuwait Petroleum Corporation, Sonatrach.

International companies that have a market share in upstream sector are:

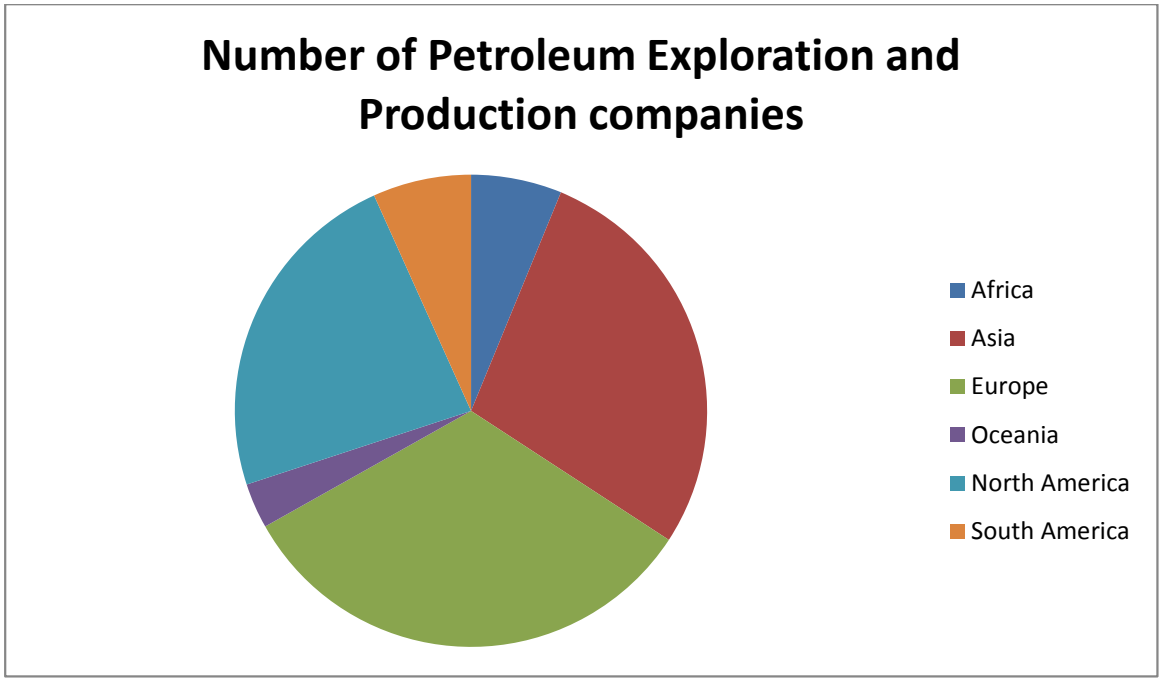
- BG Group
- BHP Billiton

- ConocoPhillips
- Chevron
- Eni
- ExxonMobil
- OMV
- Hess Ltd
- Marathon Oil
- Total
- Tullow Oil
- First Texas Energy Corp

The **midstream sector** is dominated by a number of companies that specialize in gathering, processing, transportation, storage and technological application services. Midstream companies include:

- Aux Sable
- Bridger Group
- DCP Midstream
- Enbridge Energy Partners
- Enterprise Products Partners
- Genesis Energy
- Gibson Energy
- Inergy Midstream
- Kinder Morgan Energy Partners
- Oneok Partners
- Plains All American
- Sunoco Logistics
- Targa Midstream Services
- TransCanada
- Williams Companies

Petroleum (crude oil) exploration and production companies: There are around 200 companies globally with 12 companies in Africa, 54 companies in Asia, 63 companies in Europe, 6 companies in Oceania, 45 companies in North America and 13 companies in South America.



Major Oil and Gas Companies in Australia:

Many of the world's largest oil & gas exploration and production companies have representation in Australia. Apache Corporation, Arrow Energy, Australian Worldwide Exploration Ltd, Bass Strait Oil Company Ltd, Beach Petroleum Ltd, BHP Billiton Petroleum, Carnarvon Petroleum Ltd, Chevron Australia, ConocoPhillips Australia Pty Ltd, Cue Energy Resources Ltd, Eni, ExxonMobil Australia (Esso), INPEX, Magellan Petroleum Australia, Metgasco Limited, Mosaic Oil, Nido Petroleum Limited, Oil Search Limited, OMV Australia Pty Ltd, Origin Energy, QGC, ROC Oil Company, Santos Limited, Senex Energy Limited, Shell in Australia, Strike Energy, Stuart Petroleum Limited, Tap Oil Limited, Total in Australia, Tri-Star Petroleum, Woodside Energy Limited.

Top 10 Universities which offer Petroleum Engineering:

1. Texas A&M University
2. University Of Adelaide
3. University Of New South Wales
4. Colorado School Of Mines
5. University Of Manchester
6. University Of Texas
7. The University Of Stavanger
8. Curtin University
9. Universiti Teknologi Petronas
10. Heriot-Watt University

Global Petroleum Associations:

1. American Association of Petroleum Geologists
2. American Institute of Mining, Metallurgical, and Petroleum Engineers
3. Australian Institute of Petroleum
4. Australian Petroleum Production and Exploration Association
5. Canadian Association of Oilwell Drilling Contractors
6. Canadian Association Of Petroleum Producers
7. Canadian Heavy Oil Association
8. Canadian Institute of Mining, Metallurgy and Petroleum
9. Canadian Society of Petroleum Geologists
10. Denver Region Exploration Geologists' Society
11. Independent Petroleum Association of America
12. Japanese Association for Petroleum Technology

Professional and Industry Associations in Australia

- The Society of Petroleum Engineers (SPE)
- The Australian Petroleum Production & Exploration Association Ltd (APPEA)
- The Petroleum Exploration Society of Australia (PESA)
- Engineers Australia

Why Brisbane?

Brisbane has been ranked as more beautiful than Kyoto, Seville, Rio de Janeiro and astoundingly Sydney in a social media poll by travel guide company Rough Guides.

It's official and it's global. Brisbane has been named 25th in the Monocle Magazine index of the world's top liveable cities. The poll, which took its votes from Twitter and Facebook, rated Brisbane and Sydney as the eighth and thirteenth most beautiful cities in the world respectively.

"(Brisbane) has been chosen for its winning combination of high-rise modern architecture, lush green spaces and the enormous Brisbane River that snakes its way through the centre before emptying itself into the azure Moreton Bay,"

The good drum on Brisbane is our fine subtropical climate; our 2792 hours of sunshine a year; our 44 book shops; and our leafy parks with their 906 council-operated barbecues. And then there's Brisbane's low cost of living in comparison to other Australian cities; a spacious inner city environment; our multiculturalism; our thriving restaurants and cafes; unique architecture; outdoor lifestyle; and an efficient network of ferry, train and bus lines that link the city's sprawling suburbs to the CBD.

Why to attend???

With members from around the world focused on learning about Petroleum and Refinery; this is your single best opportunity to reach the largest assemblage of participants from the global

petroleum sector. Conduct demonstrations, distribute information, meet with current and potential customers, make a splash with a new product line, and receive name recognition at this 3-day event.

World-renowned speakers, the most recent techniques, tactics, and the newest updates in the field of petroleum and refinery are hallmarks of this conference.

Expected Targeted Audience: