CHAPTER 1

EVOLUTION OF US ENERGY POLICY
Several elements contribute to the energy requirements of a nation not just its geographical, economic and technical considerations, but also its social and political stand. It is therefore essential for every country to find adequate means of these resources complemented with a stable social, economic and environment-friendly methods of excavation and processing of these resources to forms of energy consumable to the customer. In addition to this, the countries are expected to follow a certain code of conduct in carrying out these operations. The policies, regulations and political decisions taken in regard can facilitate the process or hinder the resources regardless of its technical and economic advantages.

It is an established fact that ‘Energy’ is the basic requirement for any society. It can be perceived as the substitute of the power of matter for the power of man. Energy security would thus occupy a prominent place for most countries. For the US, energy security falls both in ‘National Security’ and ‘Economic Security’ compass that highlights the development of a nation. In this connection, it is relevant to mention the stand taken by Henry J. Hyde, member of the House of Representatives. He affirmed that the national security of the United States depends on the reliable supply of energy. Hyde declared that "We count on energy to protect our security, to fuel our cars, to provide heat and to manufacture goods and supplies"(US 107th Congress, Session 2nd , House of Representatives, Committee on International Relations, Hearings, “Oil Diplomacy: Facts and Myth Behind Foreign Oil Diplomacy” June 20, 2002:10-20). According to him, an interruption in the flow of oil will be considered as a vital threat to the national security. If such an interruption is caused by the actions of a hostile state or guerrilla group, it could be cited as a cause of war.

History reveals that it was during 1912, when the United States began to view petroleum through a national security prism. Since the United States possessed huge supplies of untapped oil, it did not deploy forces in protecting overseas supplies. However in order to cope with the ongoing depletion of the domestic sources the US began to gain control over the foreign sources of petroleum. The source chosen for this purpose was Saudi Arabia. Hence it can be
said that it was only after the Second World War, especially during the middle of the war when the United States realised the necessity of securing the foreign sources of energy (Kash1984: 37-42).

Further, it is evident that the link between oil and national security has become a significant issue by the end of Second World War. The geologists in the United States felt that were dwindling and consequently it was increasingly becoming dependent on foreign sources of oil. The foreign sources of oil are generally located in areas of instability and conflict. Thus the line between oil and national security emerged very prominently in United States foreign policy (Colorado Geological Survey 2008: Online: web).

As acknowledged by the Bush administration in the Report of the National Energy Policy Development Group,

"On Our Present Course' (2000)"America 20 years from now will import two of every three barrels of oil which means a condition of increased dependency on foreign sources that do not always have America's interest at heart" (Reliable, Affordable, and environmentally Sound Energy for America's Future, Report of The National Energy Policy Development Group 2001: Online: web).

From the above statement it can be inferred that such situations may lead to increased focus on the supply of energy to the United States as an important aspect of United States foreign policy. Further, it could also explain the military involvement in areas that supply petroleum to the United States. In fact the criticality of supply of energy to the United States has made “energy security” an important aspect of United States foreign policy.

The United States has in place various federal energy efficiency programmes after the rise in prices of fuel (oil and gas) in 2000. The vulnerability of energy infrastructure underwent serious questioning in the wake of the 9/11 terrorists attacks and the subsequent war on Iraq in 2003. It highlighted the need for alternative sources of energy. In addition, US introduced energy conservation reforms in 2001 when the country faced a severe energy crisis in California, to help dampen electricity demands. It was soon amalgamated with the Bush administration’s ‘War on Terror’. However, the present policy can better be
understood if one examines the US dependence on oil and articulation of its energy needs in the past.

This chapter briefly discusses the evolution of US energy policy and contends that it was at first based on the domestic consumption patterns and production. Later, as oil production levelled off, US dependency on foreign sources of oil began. By the 1970s, the oil import had crossed fifty per cent and thus began US search for a sustainable energy policy. This chapter examines the policy process in the US and its attempt to meet the oil crisis. This chapter mainly focuses on the following assumptions:

- There been a consistent US energy policy in the post Cold War period.
- The international and domestic developments influenced the formation of a coherent ‘oil policy’ in the United States.

The chapter will examine the geo-political and geo-economic variables which influence the basis of fuel policy in order to contextualise the external development that influence policy formulations in the US. Finally the chapter will examine the policy initiatives such as the Energy Policy Act of 1992, the provisions of Silk Road Strategy Act of 1999, Energy Security Act of 2005 and Energy Independence and Security Act of 2007 in order to explain the changing dynamics of United States energy policy.

**Early Phase: From Domestic Oil to Import of Oil**: One must begin to view the US approach to its energy security from historical perspectives. The history of energy use in the United States can be analysed under three categories. First, wood energy which had been a significant part of the U.S. energy mix since colonial times was overwhelmingly the dominant energy source. Second, coal energy replaced the long dominance of fuelwood in the United States by 1885. Third, petroleum and natural gas energy replaced wood and coal and consequently hydroelectric power and nuclear electric power appeared about 1890 and 1957, respectively (US Department of Energy, Energy Information Administration: 2001).
Further, the petroleum industry made continual technological advances that allowed it to emerge as society's major source of energy and lubrication during the twentieth century. It was John D. Rockefeller, working within the South Improvement Company for much of the late 1860s who laid the groundwork in order to gain absolute control over the industry and formed the famous Standard Oil Company of Ohio in 1870. However, the dissolution took place in Standard Oil because of the antitrust laws passed by the Eisenhower administration. This dissolution resulted into the present day's Mobil, Exxon, Chevron, Amoco, Conoco, and Atlantic among others (Encyclopaedia of Earth, Petroleum History, United States 2007: Online:web).

By 1960s, many recorded the fact that nations around the world drew from Rockefeller's model to devise a new structure. Massive international companies managed the import and export of oil regardless of the resource's nation of origin. The importer companies in Western industrialized nations were, in many cases, were in control of supply and demand and, therefore, prices (Ibid).

There was a change in the situation on the domestic front too. The Eisenhower Administration implemented quotas on the import of crude oil in view of the decline of domestic oil. However, such quotas infuriated global oil-producing countries throughout the 1960s. Public records show that by September 14, 1960, a new organization was formed to eliminate the practice of companies making money by extracting oil around the world—the Organization of the Petroleum Exporting Countries (OPEC). OPEC's objective was to defend the price of oil and to insist that US companies consult with them before altering the price of crude oil. They also developed mutual solidarity, and strategized to negotiate with oil companies and Western nations in a bid to gain control of the politics of oil markets (Ibid).

It is surprising that exhaustion of United States oil reserves was predicted by the petroleum geologists and economists as early as the 1950s. In fact the government geologists were among the first to predict that the United States oil resources would diminish more rapidly than was generally believed. However, in the opinion of the economist John Blair, since their analyses were published in
academic journals or Congressional Hearings it was ignored or forgotten. In the
words of experts “Warning of an impending shortage was highly inconvenient to a
government embarked on a programme designed to enlarge the oil producers’
profit by excluding what were then low cost foreign imports” (Polukhov1997:13-20).
In a report published in 1956, it was stated that the nation’s oil production
would rise steadily till 1970 and then begin a sustained and irreversible decline.
This prediction proved astonishingly accurate. The domestic crude oil production
increased in 1970 after many decades, at 9.6 million barrels a day. As evidence
indicates since then, crude oil production in the United States declined. United
States oil production rose during the first six months of 1978 because of the influx

As domestic oil production levelled off and then declined. Consequently,
the United States became dependent increasingly on imported oil. Between 1969
and 1972, the United States expanded its oil import by 52 per cent. Most of the
increments in oil imports came from the Middle East. By 1972, United States
received 850,000 barrels of Arab oil a day which represented 17.9 per cent of all
United States oil imports (Clawson 1995:12-16).

This was viewed quite optimistically by the Carter administration. In
addition both Carter and Congress realised that new technologies are required to
absorb the supply of energy from foreign sources which further could be the
solution for the giant energy crisis faced by the US. Hence numerous technological
innovations were offered. Almost overnight, the number of possible new energy
resources doubled. But unfortunately most of the newly proposed alternatives were
characterised by a high degree of uncertainty. They were not commercially
available “off the shelf”. There was no agreement within the scientific-
technological community about when these proposed new sources could be made
available, at what price and with what environmental consequences. The wide
range of options, surrounded by technical, economic and ecological uncertainties,
complicated the process of arriving at a consensus on energy policy (Kash 1984:92-97).
At this time the United States began an 'energy policy' that was a careful balance between the concerns for national security and domestic concerns namely, economic well-being which were well defined by domestic interest groups. US policy makers acknowledged that the economy of the country was been adversely affected by the tightness of the international oil market and the degree of United States' dependence on foreign sources of oil. This consequently played a crucial role in shaping international energy policy and increased prices. The degree of crude oil market tightness also affected numerous economic actors in the United States such as consumers, independent oil producers as well as the American transnational companies. This was evident in the world oil shock of 1973 that began on October 17, 1973, when Arab members of the Organisation of Petroleum Exporting Countries (OPEC), in the backdrop of the Yom Kippur War, denied petroleum shipment to nations that had supported Israel in its conflict with Egypt that is, to the United States and its allies in Western Europe (Shaffer 1983:19-25). In addition, the OPEC member states agreed to use their leverage over the world price-setting mechanism for oil to quadruple world oil prices. As the US acknowledged, the entire industrialised world depends on oil, much of which resides beneath the surface of Middle Eastern countries, and, the Arab-Israeli conflict triggered an energy crisis resulting in an embargo. Before the embargo, the industrialised West especially the United States had taken cheap and persistent flow of oil for granted (Darren: 1979: 143-147).

The Yom Kippur War of 1973 triggered negative Arab opinion about the US. As a reactive measure against the emergency re-supply effort which enabled Israel, Egyptian and Syrian forces to be sustained. The 1973 oil embargo was imposed by the Arab world against the United States, Western Europe, and Japan. The Arab-Israeli conflict triggered a crisis already in the making. This was stressed by the Shah of Iran, whose nation was the world's second-largest exporter of oil and the closest ally of the United States in the Middle East at the time (Shaffer 1983:48-52).
The Shah told the *New York Times* in 1973:

"Of course the world price of oil is going to rise, and how... You (Western nations) increased the price of wheat you sell us by 300 per cent, and the same for sugar and cement... You buy our crude oil and sell it back to us, redefined as petrochemicals, at a hundred times the price you've paid to us... It's only fair that, from now on, you should pay more for oil. Let's say 10 times more." (Quoted in Smith, Price Quadruples for Iranian Crude Oil at Auction", *New York Times*, 12 December 1973, Online: web).

**Domestic Reactions and New Policy Initiatives 1975-1999:** From 1973 to 1980 several Presidents and Congresses struggled continuously to formulate an effective energy policy for the nation's cheap, abundant energy. The magnitude of the 1973 crisis placed the government under considerable pressure to formulate a national energy policy to achieve these goals. Till the 1973 oil embargo there was no serious system to make a coherent national energy policy system in the United States. There existed a few autonomous policy systems for the above mentioned fuels. But the 1973 oil embargo starkly demonstrated the inadequacy of the fuel policy. At the beginning of 1974, President Nixon launched 'Project Independence' (US Department of Energy, "Energy Timeline from 1971 to 1980" Online: web). It was America's response to the Arab oil embargo. The aim of the project was to achieve self-sufficiency in energy production. Unfortunately, the dependence of the United States on imported oil was increasing. This problem was compounded the fact that there was no national energy policy. At this juncture, though the 'Project Independence' did not chart any policy, it became an important document. The executive and the legislative branches of the federal government began to address the energy problem in a more substantive way. However, there was a lack of consensus that prevailed between the Congress and the President on the energy issue which was expressed by an analyst in the following words.

"This then, is our energy problem: we are vulnerable but divided when reducing our vulnerability requires that we are able to act with a kind of purpose and determination that, in our system, requires a very broad consensus. We need to begin a long and difficult transition, but we are not able to agree to what, in which directions, and with what first steps. Clearly our alternatives are many; the uncertainties are great, and the participants in energy policy making have a wide range of legitimate concerns. But if we fail to identify a path that we can travel together, the result will almost certainly be disastrous. The American people expect our economy and our system of government to deliver the energy it takes to
maintain a good standard of living. If we fail to deliver, there are likely to be significant and irreversible changes in our system” (Cowhey 1985: 102-103).

A compelling need for a comprehensive approach to energy was thus felt during the post-embargo period. This led to the creation of the Department of Energy in 1977, which was made responsible for articulating and managing United States energy policy. The energy policy of the United States following the embargo of 1973 during successive administrations revolved around one common factor: ‘Energy-Crisis’. However, the initiatives of the various administrations with regard to energy policy are different. This is evident from analysing the various measures taken by the subsequent administrations in order to meet the energy demand of the nation. ‘Energy’ has been linked to different issues by the government. The following analysis of the evolution of energy policy over the years illustrates the changes that occurred and the continuity retained.

**Energy Policy during Nixon’s Administration:** Since the period immediately after the embargo was characterised by self-sufficiency rhetoric, the “Project Independence” was launched by the Nixon administration. The “Project Independence” called for a scientific programme and technological fixes, such as a synthetic fuel system (Department of Energy, “Energy Timeline from 1971 to 1980” Online: web). Actions were also taken in order to meet these targets.

The formulation of “Project Independence” for the purpose of increasing domestic energy supplies, limit foreign imported oil, and advance national energy planning, proved futile. The reason for the failure was attributed to the fact that the proposal was hastily conceived, technologically infeasible and contradictory, hence they were bound to fail. Public response to such a programme was apathetic, therefore the task of self-sufficiency lessened dramatically. Finally the project failed to achieve the dual policy objectives of reducing United States oil imports and increasing domestic production of all forms of energy. As a consequence, the executive and the legislative branches of the government began to address energy problems in a more substantive way (Treverton 1980:26-30).

**Energy Policy during Ford’s Administration:** The Ford administration acknowledged the ‘energy crisis’. In order to overcome the crisis, new federal
energy regulations, marketplace solutions, accelerating exploration for energy resources and production of new domestic energy resources, relaxation of environmental standards early which inhibits domestic energy production was followed by the Ford administration. Further he declared in January 1975, that “We face a future of shortages and dependency which the nation can’t tolerate and the American people will not accept” (Crawford 1981:429-35).

However, lack of consensus prevailed between the Congress and White House with regard to the measures adopted to combat the energy crisis (Tugwell 1988 Online: web). President Ford preferred immediate response to the United States’ energy problem. Consequently, the “Energy Policy and Conservation Act” was passed in 1975 (Ibid). The President wanted a legislation which would enable him to abolish the existing price controls on domestic petroleum quickly as a conservation measure. The act in its final form only provided for the gradual elimination of controls by 1981. So one could infer that the Congress concurred with the White House with considerable ambivalence (Treverton: 1980:52-58).

Energy Policy during Carter’s Administration: The Carter administration began with the natural gas crisis and ended with the hostage crisis. From the beginning of the Carter administration, energy issues occupied a prominent place in its agenda. Energy also became the major domestic issue during the Carter administration. Its energy programme was organised around the following broad objectives:

• To centralise federal energy planning through institutional reform,

• To achieve greater energy efficiency and conservation through selective use of market forces,

• Expansion of federal regulatory authority,

• Rapidly increase federal spending on research and development of new technologies for energy conservation and production,

• And to ensure the environmental protection and social equity would be important in these new programmes (Victor1984: 102-107).
The Carter administration executed the "National Energy Plan" which was a pragmatic approach towards energy affairs. The policy agenda for the Presidency and Congress for four years was also set by this plan. According to the first principle of the plan the energy crisis can be effectively addressed only by a government that accepts responsibility for dealing with it comprehensively (Victor 1984:313). In order to promote energy efficiency and reduce dependence on imported oil, the plan suggested setting up of new industrial and utility plants that use coal instead of natural gas or petroleum for fuel, and conservation of energy was given due importance. The centralisation and integration of federal energy planning by the Department of Energy (DOE) was proposed. In order to facilitate the conservation of energy, President Carter advocated a gradual decontrol of domestic natural gas and petroleum prices. Clearly, the Carter administration intended to treat the energy problem like a national emergency. Before presenting the "National Emergency Plan", the President, in a television address, escalated the energy crisis into 'war':

"The most important thing about these proposals is that the alternative way be a national catastrophe. Further delay can affect our strength and our powers as a nation. Our decision about energy will test the character of the American people and the ability of the President and the Congress govern this nation. This difficult effort will be the "moral equivalent of war" (Carter, Speech, April 18, 1977).

A significant advancement over the United States energy policy can be seen in terms of the federal energy management by the President and the Congress by the end of Carter's administration. These included,

- Decontrol of domestic gas and petroleum prices,
- New energy conservation regulations,
- Massive increase in federal R and D spending for new energy technologies,
- Further control on imported oil prices and petroleum industry profits,
- More environmental safeguard on energy use and
- A new Department of Energy (Ibid).
However, the administration failed to mobilise the people to rally behind the 'Energy War.' Some analysts pointed out that the political incompetence of the administration surfaced during the Iranian hostage crisis. In addition to this an indirect result of the nation's heavy dependence on imported Iranian oil brought Carter's energy war and his presidency to a sour end. This decade was called "the decade of the energy paradigm" by the economist Jack Baakeabus (Victor 1984:319-325).

Energy Policy during Ronald Reagan's Administration: The Reagan administration followed a different approach towards the energy programme. This approach aimed at dismantling most of the federal energy programmes of his three predecessors Nixon, Ford and Carter. Energy production received more attention and spending on energy research decreased. Reagan had stressed the dominance of the private sector instead of using government to direct energy policy. However, while the President threw all his efforts to get rid of the Department of Energy (DOE), as it was considered inefficient and unnecessary, could not convince the Congress to do so. He, however, was able to reduce the Department of Energy's authority, resources and influence on national energy affairs. After winning the presidential election in 1980, Ronald Reagan, during his acceptance speech at the Republican National Convention argued that-

"The United States must get to producing more energy... large amounts of oil and natural gases lie beneath our land and off our shores...coal offers great potential... so does nuclear energy produced under rigorous safety standards.... It must not be thwarted by a tiny minority opposed to economic growth which often finds friendly ears on regulatory agencies for its obstruction campaigns" (Mitchell 1996:212-217).

From the above argument made by Ronald Reagan, two assumptions can be deduced, i.e.

- The United States held huge quantities of conventional energy resources which are yet still to be found and produced.

- The reason for the energy resources not being found and extracted were because of counterproductive federal policies.
Therefore, the Reagan administration committed itself to reversing a trend towards government involvement in energy that had been growing since the oil embargo. One of the major changes in energy policy during Reagan’s administration was that it started looking at energy from an economic point of view. It rejected the notion that energy required special policy attention. Energy was treated as a commodity. In order to overcome the energy problem, President Reagan resorted to the economic market place rather than political decision-making. In the words of James Edwards, the then Secretary of Energy, Reagan’s approach towards energy was designed to “produce, produce, and produce” (Katz 1984: 135-140). The search for renewable resources and the focus on conservation was downplayed by the Reagan administration (Mitchell 1996: 105-107).

The major changes instituted by the Reagan administration are as follows Reagan inherited a set of energy policy goals with minimal consensus. These goals were-

- Abundance,
- Cleanliness and
- Security (Katz 1984: 135-140)

**Abundance:** The Reagan administration preferred maximisation of supplies than the reduction of demand. Energy conservation was viewed as a major contributor to economic stagnation in the country except where the conservation is motivated by market-dominated prices. According to the Reagan administration the policy focus on conservation is a reflection of “no growth mentality” and abundance could be achieved only by reducing restrictions on the productive capabilities of the private sector.

**Cleanliness:** With regard to the goal of clean energy, the Reagan administration differed from its predecessor. The excessive environmental regulation was perceived as a major obstacle in solving the nation’s energy problem by the Reagan administration. The aim of the administration was to establish a “reasonable balance” between energy and environmental values. The
difficulty of determining the value of clean water and clean air was acknowledged by the administration. The best approach was to “try to use free market principles to assess public attitudes”, and the administration used this assessment to find optimal resolutions.

Security: Energy security was also to be left predominantly to the marketplace. The administration indicated that it would place “primary reliance on the market forces to determine the price and allocation of energy supplies even during an emergency” (Victor 1984: 98-102).

The Reagan administration acknowledged that specific government programmes were required to achieve the above mentioned goals. However, the Reagan administration differed from previous administrations in two ways—one, in terms of the relative priority it assigned to each goal, second, the manner by which the goals should be pursued. The administration argued that the content of the goals and the manner in which they should be achieved should be defined by the marketplace. Supply and demand mediated by price, should determine the nation’s energy future. They maintained that the market would more effectively contribute to their achievement.

Reagan’s administration observed that the exact path of energy development and market was uncertain. Additionally the nation’s energy situation can be drastically altered by unpredictable events like an economic downturn at home or abroad, technological innovations, geological discoveries, political or military conflict or even variations in public attitude. However, they repeatedly stressed that this administration believed in free market philosophy which would allow the American people to essentially conduct an ongoing national plebiscite in the marketplace to articulate their individual and collective assessment of possible courses of action.

In sum, the Reagan administration consistently articulated the view that the nation’s energy goals would most effectively be achieved by removing the government from the scene. This was echoed in the discussions and actions of the Congress.
Thus it may be stated that by the end of 1980s the President and the Congress were able to reach an agreement on the above mentioned four issues which were absent during the energy crisis. After the compromise on these issues, the foundation for a stable national energy policy came into existence. The rudimentary energy policy system formulated by 1980 provided the framework necessary to manage both energy supply and demand and to develop new resources (Victor 1984:105-109).

Energy Policy During the 1990s: The energy crisis of 1990-1991 again reignited the urgency of developing a consistent and coherent national energy strategy. However, in view of the invasion of Kuwait by Iraq, at the beginning of the 1990s there was a curtailment of oil exports from the region and oil prices increased significantly. This awakened the politicians and the media about the rising oil prices, dependence on Middle East oil, and the absence of any coherent energy policy in the United States. (Jaskow 2002: 99-105). Consequently, the Department of Energy (DOE) developed a "national energy strategy" and the policy options were provided to President George H.W. Bush. Thus the administration proposed a federal policy legislation in February 1991 to the Congress. This proposed legislation focused on increasing production of oil, natural gas and nuclear power. It also included oil and gas exploration in the "Arctic National Wildlife Refuge" (Eikeland 1993:987-982). Since the proposal was very controversial, it was rejected by the Democrats and the environmentalists (Ibid).

However, this energy crisis was of a short duration and consequently the interest in energy policy soon faded. This was due to the fact that the abundant

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1 Iraq invaded Kuwait on August 2, 1990, causing crude oil and product prices to rise suddenly and sharply for the third time in 17 years. After the United Nations approved an embargo on all crude oil and products originating from either country, fears of shortfalls similar to the magnitude of those in 1979 caused the rapid price escalation. Between the end of July and August 24, 1990, the world price of crude oil climbed from about $16 per barrel to more than $28 per barrel. The price escalated further in September, reaching about $36 per barrel. When the United Nations approved the use of force against Iraq in October 1990, prices began falling. This was after only two months of price escalation, even though the crisis led to a two-month war that lasted from January to March 1991. The cut-off of about 4.3 million barrels per day of Iraqi and Kuwaiti petroleum tested modern petroleum markets. Since 1979, these markets had become more global and had controls in place that were intended to keep the logistics of world supply and demand more balanced “Persian Gulf Crisis of 1990-1991”, US Department of Energy, US Energy Information Administration.
supplies of energy continued during this period. Along with this, there were stable or falling “real” energy prices and relatively little public or political interest in national energy policy issues. This period thus witnessed the continued increase in the energy demand, but also an adequate supply was able to meet this demand without a major increase on prices till the end of the decade. So because of this reason no new energy policy initiatives arose and none were high on the policy agendas of either the Clinton administration or Congress during the 1990s (Babus, S., Yaphe, J.1999:60-65).


A comprehensive energy efficiency programme was established which included creating efficiency standards for appliances and energy conservation in buildings. The Public Utility Holding Company Act of 1935 was amended to help small utility companies stay competitive with larger utilities. It outlined new rate making standards and expanded the range of resource choices for utility companies. A separate section is devoted to coal, oil, natural conservation goals
and responsible management practices (Kenney 2008: The Encyclopaedia of Earth Online: web).

While, the debate on energy policy continued in 1992, concerns about high prices, potential shortages and dependence on imported oil faded quickly with the end of the first Gulf War. United States energy consumption grew by 17 per cent between 1990 and 2000. The growth of consumption was realised in nearly all sectors, i.e. residential, commercial, industrial and transportation during the decade. The distribution of energy use among the above mentioned sectors changed very minimally between 1990 and 2000. The only change which occurred during this period was that there was a marginal increase in the share of natural gas and a small decrease in the petroleum share. This period witnessed the decline in oil production and increase in the import of energy by more than 50 per cent. Considerable changes also occurred between 1999-2000 with regard to world oil, domestic natural gas and electricity market. The changes occurred during this period drove the attention towards the fact that the United States dependence on imported petroleum was increasing substantially. However, the scenario with regard to oil changed slightly, i.e. oil production remained less concentrated in the Persian Gulf compared to 1973. It was believed that United States petroleum imports would continue to grow in the future and hence the domestic supply side initiative will not significantly alter this trend, even if the policies with regard to expanding the drilling opportunities on federal lands are adopted. Hence it can be deduced that there was an assessment in the policy circle that American dependence on imported oil appeared to be something that the US may have to live with for a long time (Barnes 2002: 88-90).

Impact of September 11, 2001, and Changed Nuances: While, recognition of the US renewed focus on CAR animated the debate on the “Great Game in Central Asia”, it must be noted that US foreign policy towards Central Asia predated September11 (US 110th Congress, Session 2nd, Senate, Committee on Foreign Relations, Hearing, “Oil, Oligarchs and opportunity: Energy from Central Asia to Europe”, 12 June, 2008). The American foreign policy often seemed inconsistent to most parts of the world. However, the policy towards
Central Asia seems to be different. It appeared to have had a clear, hard-headed thrust in the United States foreign policy even before “9/11”. Developing closer relations with Central Asian States were given emphasis by the Clinton administration. His policy intended to integrate these states into the international community with the intention that responsible security procedures and other policies would be followed to discourage xenophobic and anti-Western orientation. The policy goals in Central Asia during Clinton’s administration mirrored the different strategic and economic characteristics of these states. For example, the United States articulation of its interests in Kazakhstan included promoting the renewal and security of strategic nuclear weapons and materials located on its territory (Woolf. 2003: Online: web). The United States pursued economic and business interests in Central Asia, predominantly as it related to oil and natural gas development in Kazakhstan, Turkmenistan and Uzbekistan. During the Clinton administration, one of the main characteristics of the energy policy was that it was explicitly channelled by environmental concerns. The administration therefore focused on programmes to encourage renewable energy, alternative fuel vehicles, energy efficiency and the increased use of natural gas in electricity generation and vehicles. The pragmatic approach for achieving energy security can be better understood by analysing the Silk Road Strategy Act of 1999 formulated during Clinton administration.

The Silk Road Strategy Act of 1999: The 1999 White House Paper on a new “National Security Strategy” (News Release March 23, 1999 Online: web) called for investment in the Caspian energy resources and their export from the Caucasus region to the world market, in order to expand prosperity in the region:

“A stable and prosperous Caucasus and Central Asia will facilitate rapid development and transport to international markets for large Caspian oil and gas resources, with substantial US commercial participation. Resolution of regional conflicts such as Nagorno-Karabakh and Abkhazia is important for creating the stability necessary for development and transport of Caspian resources.” (US 106th Congress 1999-2000, H.R. 1152: The Silk Road Strategy Act of 1999, Online: web).

The Silk Road Strategy Act of 1999 was introduced by Senator Sam Brownback, Senator Gordon Smith and eleven co-sponsors on March 10, 1999.
On March 23, 1999, the Committee on Foreign Relations debated and ordered the bill by a voice vote. The bill was reported favourably by the Committee on Foreign Relations and was recommended to be passed without amendment on May 11, 1999 ("Brownback Silk Road Strategy Act Passes Senate Foreign Relations Committee Today" News Release March 23, 1999: Online: web). The purpose of this bill was to amend the Foreign Assistance Act of 1961 and the objective being to provide assistance to support the economic and political independence of the countries of South Caucasia and Central Asia. The bill, however, was passed in November 1999.

The three constituents of this strategy were diplomacy, economy, military affairs and information. Its primary objective was to reinforce security through efficient diplomacy and military might, promote domestic security and promote democracy. Since the axial situation of Central Asia demands the above mentioned component of strategy i.e. diplomacy, economy and military might, it has become inevitable for the United States to retain its central position in the three regional systems of Europe, Asia and the Middle East. They illustrate Brzezinski's stance on Eurasia as "the world's axial superpower continent" and the geopolitical chessboard decisively important to America's global primacy and historical legacy" (US 106th Congress, Session 1st House of Representatives, Committee on Foreign Relations, Hearings,” US Economic and Strategic Interests in the Caspian Region: Politics and Implications"1999).

This Act seeks to build an east- west axis of political cooperation and trade granting geopolitical balance on the southern periphery of the former Soviet Union. Secondly, the institutionalisation of this comprehensive strategy of trade, economic assistance and foreign policy throws aside the idea of de-politicisation and separate tracks, thus eliciting protests and resistance. The objective of this strategy was to reduce trade friction, deepening economic relations, reinforcing political ties. Furthermore, supporting historic market reforms in order to help emerging democracies have been prioritised by this strategy. Its goals are two folds

- Continue to mobilise the international community to provide assistance to support reform,
• To cooperate with the Central and Eastern European and Newly Independent State countries to stimulate foreign (especially by United States companies) and domestic private investment.

In sum, the Silk Road Strategy Act which was passed in the 1st Session of the 106th Congress aimed to make amendments to the Foreign Assistance Act 1961. The objective of the amendment was to ensure full support to the political and economic independence of all countries in the Central Asian and South Caucasian region. The Foreign Assistance Act, 1961 was renamed “Silk Road Strategy Act,” constitute following provisions:

• The Silk Road, once the “economic lifetime” of Central Asia and South Caucasus, previously crossed the territories of the present-day Armenia, Georgia, Turkmenistan, Tajikistan, Kazakhstan, Azerbaijan, Kyrgyzstan and Uzbekistan.

• Since the people of these countries were interdependent economically, they maintained mutual cooperation along the Silk Road. Today, restoration of such economic and political ties between the nations is imminent to maintain the sovereignty and to ensure the success of their democratic and market reforms.

• The mutual cooperation in the political and economic context within the countries of Central Asia and South Caucasus are sure to foster stability in the region, which, under the political and economic pressure from regions surrounding them are vulnerable.

• Induction of liberal democratic reforms and open market conditions to the countries of South Caucasus and Central Asia will provide positive incentives for international private investment, increased trade and other forms of commercial interactions with the rest of the world.

• Many of the countries of the South Caucasus have secular Muslim governments that are seeking closer alliance with the United States and that have diplomatic and commercial relations with Israel.
• The region of the South Caucasus and Central Asia could produce oil and gas in sufficient quantities to reduce the dependence of the United States on energy from the volatile Persian Region.

• United States foreign policy and international assistances should be narrowly targeted to support the economic and political independence as well as democracy building, free market policies, human rights, and regional economic integration of the countries of the South Caucasus and Central Asia. (Ibid).

According to the Act of 1999, it should be the policy of the United States in the countries of the South Caucasus and Central Asia-

• To promote and strengthen independence, sovereignty, democratic government and respect for human rights;

• To promote tolerance, pluralism, understanding and counter racism and anti-Semitism;

• To assist actively in the resolution of regional conflicts and to facilitate the removal of impediments to cross-border commerce;

• To promote friendly relations and economic cooperation;

• To help promote market-oriented principles and practices;

• To assist in the development of the infrastructure necessary for communications, transportation, education, health and energy trade on an east-west axis in order to build strong international relations and commerce between those countries and the stable, democratic and market oriented countries of the Euro-Atlantic community;

• To support United States business interests and investments in the region (Ibid).
The Silk Road Strategy Act of 1999, which amends the Foreign Assistance Act of 1960 and was enacted as part of the FY 2000 Foreign Operations (US Department of State, Bureau of European and Eurasian Affairs, 2003 Online: web).

However the connection between oil and politics was emphasised especially after the September 11, 2001 attack on the World Trade Centre and Pentagon. Since 15 out of 19 hijackers were from Saudi Arabia which constitutes one-fourth of the world's total petroleum reserves, the September 11 fiasco impacted the oil market to a considerable extent. Besides this, being the major power in OPEC, Saudi Arabia had the privilege to control the global price and supply of oil, which made the United States vulnerable. In view of the circumstances United States once again concentrated on finding energy alternatives in order to fulfil its requirement. In several commentaries that analysed US oil policy the focus was mainly on the three objectives. First, the US would encourage exploration, production by gaining physical access to oil, and transport it to the US. Second, it would ensured availability of oil at reasonable prices for both producing and consuming states alike and third, it would attempt to gain influence on the newly independent oil rich Central Asian Republics (CAR) to fulfil above mentioned objectives (US 107th Congress, Session 2nd, House of Representatives, Committee on International Relations, Hearings, “Oil Diplomacy: Facts and Myth Behind Foreign Oil Diplomacy” 20 June 2002:12-19).

In this context it may be mentioned that the engagement of fifteen sovereign and independent countries, emerged after the disintegration of the Soviet Union in December 1991 made a decisive impact on US policy. Of these, five countries, namely Kazakhstan, Kyrgyzstan, Tajikistan, Turkmenistan and Uzbekistan together constitute the Central Asian Republics (CAR). The region was neglected on various accounts from their natural neighbours for several years due to their remote location, landlocked status and geopolitical position at the periphery of the Soviet empire. It is important to mention here that the United States was not engaged in the region before the Soviet disintegration, despite the fact that it had good repository of oil, natural gas, gold, uranium and other minerals (Chandra 2001:54-56). It was only when American foreign and security priorities
witnessed a remarkable shift in its ranking due to the terrorist attack on the World Trade Centre and the Pentagon on September 11, 2001, that the major focus in the US foreign policy shifted towards is Central Asia. Owing to the progression on the war of terrorism, United States started acquiring oil and transit rights for the passage of warplanes and military supply from several countries in Central Asia. As a result, the main intent of exploring resources of other countries in order to retain the oil resources within the United States remained intact provided that it was economically and strategically feasible and also related to its war on terror (Klare 2003:Online:web).

After the terrorist attack on the United States on September 11, 2001, United States policy towards Central Asia thus revolved around three inter-related activities:

- The promotion of security
- Domestic reforms, and
- Energy development

The 9/11 attack led the Bush US administration to realise that it was critical to the national interest of the United States that they greatly enhance their relations with the five Central Asian countries to prevent them from becoming “harbours for terrorism”. However, critics pointed out that for the Bush administration the top priority was not just to prevent terrorism or to curb the spread of weapons of mass destruction rather, it was to increase the flow of petroleum from foreign suppliers to markets in the United States. This was because of the fact that the United States had experienced severe oil and natural gas shortages in many parts of the country, along with periodic electric-power blackouts in California. In addition, U.S. oil imports had just risen over 50 percent of total U.S. consumption for the first time in American history, provoking great anxiety about the security of America’s long-term energy supply. It is important to note that amidst these circumstances the former President Bush asserted that addressing the nation’s “energy crisis” was the most important task (Klare:2003: Online: web).
According to his view President Bush established a National Energy Policy Development Group (NEPDG) composed of senior government officials and charged it with the task of developing a long-range plan for the meeting the nation’s energy requirements to address these challenges. For this purpose former Vice President Dick Cheney, a former executive of the Halliburton Company was chosen to head this group, and other top officials of U.S. energy firms, including the Enron Corporation were consulted in order to provide advice and recommendations on major policy initiatives (Ibid). The former President Bush’ endeavour for ensured energy security can be understood explicitly by analysing the Energy Policy Act of 2005 and Energy Independence and Security Act of 2007.

Energy Policy Act of 2005: When the Energy Policy Act of 2005 (EP Act) was signed into law on August 8, 2005 by President George W. Bush, he acknowledged that “One day all Americans will look back on this Bill as a vital step towards a more secure and more prosperous nation that is less dependent on foreign sources of energy” (US Department of Interior, Mineral Management Service, “Energy Policy Act of 2005”: Online: web). During the Bush administration increasing energy security continued to be a priority. The Energy Policy Act of 2005 is American’s first inclusive energy legislation in over a decade and was passed with overwhelming bipartisan support. Over the years, the President continued to work with Congress to lead the nation on a path towards increased energy security and decreased dependence on foreign source of energy. In this regard it is important to note that the Congressional Budget Office estimated that that Act would increase direct spending by $2.2 billion over the 2006-2010 period, and by $1.6 billion over the 2006-2015 period. In addition, the Congressional Budget Office, CBO and the Joint Committee on Taxation estimated that the legislation would reduce revenues by $7.9 billion over the 2005-2010 period and by $12.3 billion over the 2005-2015 period. The Congressional Budget Office also noted that the bill could have additional effects on discretionary spending, but did not attempt to estimate those effects (Congressional Budget Office, 27 July, 2005 H.R. 6, Energy Policy Act of 2005, “Cost estimate for the bill conference agreement”, Online: web).
Since the passage of the Energy Policy Act 2005, the Department of Energy (DOE) along with partners across the government and in the private sectors have been working aggressively to implement its key provisions. Further, in order to implement Energy Policy Acts goals, the President proposed two new initiatives in his 2006 of the Union Address: the American Competitiveness Initiatives (ACI) and the Advanced Energy Initiatives (AEI) (Department of Energy 2006, “The Department of Energy Strategic Plan”: Online Web).

The American Competitiveness Initiatives, ACI recognises the need to substantially increase investment in science and technology in order to ensure future economic health and energy security for the United States. At the core of the President’s initiatives is a major increase in federal funding for basic research in the physical sciences along with the new programme to improve math and technical education (Quoted in ibid).

While on the other hand the Advanced Energy Initiatives, AEI seeks to significantly increase national investment in alternative fuel and clean energy technologies that over time can fundamentally transform the way America produces and uses energy. Taken together, the Energy Policy Act of 2005, the American Competitiveness Initiatives and the Advanced Energy Initiatives provide a comprehensive strategy for taking over most pervasive and long-term energy challenges. This strategy acknowledges that the energy issues which are dealt with today did not develop overnight and so, an aggressive and long term measures are adopted to face the challenge (Ibid).

After analysing the US Energy policy Act of 2005 it can be concluded that the passage of the Energy Policy Act of 2005 provided something the US had been seeking for more than a decade. A long-term strategy to confront over energy challenges in a balanced comprehensive and environmentally sensitive way was needed. The Energy Policy Act strategy advances important national goals and puts the country on a path to increase energy security. This Act also recognises that America must diversify its energy supply and reduce its dependence on foreign sources of energy; increase energy efficiency and conservation in homes and business; improve the energy efficiency of vehicles and modernise national energy
infrastructure. To meet these objectives, America will rely on one of her greatest assets—the latent ingenuity of their scientists and engineers.

Energy Independence and Security Act of 2007: On similar lines, the Energy Independence and Security Act of 2007 was also directed towards improving vehicles fuel economy and help reduce US dependence on oil. The initiatives announced by former President Bush represent the efforts towards expanding the production of renewable fuels, reducing dependence on oil and confronting global climate change. Because of such efforts, they will be able to increase energy security, expand the production of renewable fuels and make America stronger, safer and cleaner for future generations. The Energy Independence and Security Act of 2007(originally named the CLEAN Energy Act of 2007) is an Act of Congress concerning the energy policy of the United States which was introduced in the United States House of Representatives during the 110th Congress. It was passed in the House without amendment in January 2007. The bill became public law No 110-140 on 19 December 2008 (US 110th Congress, 2007-2008, “Bill Summary and status of Energy Independence and Security Act of 2007”, Online:web. The stated purpose of the act is “To move the United States towards greater energy independence, and security to increase the production of clean renewable fuels, to protect consumers, to increase the efficiency of products, buildings, and vehicles, to promote research and deploy greenhouse gas capture and storage options, and to improve the energy performance of the federal government, and for other purposes.” (Energy Independence and Security Act of 2007, govtrack.us Online: web).

The bill originally sought to cut subsidies to the petroleum industry in order to promote petroleum independence and different forms of alternative energy. These tax changes were ultimately dropped after opposition in the Senate, and the final bill focused on automobile fuel economy development of bio-fuels, and energy efficiency in public buildings and lighting.

In addition to this, it is important to keep in mind that US Policy goals regarding energy resources in Central Asia and South Caucasian states have included access over oil and gas transport routes by encouraging and building of
pipelines. The "US Pipeline Politics" with military support had begun under President Clinton, but was enhanced with the visit of the then Defense Secretary Donald Rumsfeld in December 2002, Vice-President Dick Cheney, and the former CEO of the oil services company Halliburton. It could be argued that the American "war against terrorism" has incidentally included a battle to control the energy resources of the Central Asian Region.

In line with this argument, the NATO's attempt at becoming a global security organization by engaging non-member states can be connected to the US vision of political role for NATO in the region. For example, it may be recalled that under NATO's "Istanbul Cooperation Initiatives of 2004", the allies have begun discussions with Bahrain, Qatar, Kuwait, and United Arab Emirates to build political cooperation in securing the oil fields as Middle Eastern governments are concerned about the terrorist attacks on their oil fields. With special reference to Central Asian countries, NATO has been successfully reaching towards Kazakhstan and Turkmenistan (the major oil producing countries) among CAR. These two countries are seeking ways to associate themselves more closely with NATO in order to "de-hyphenise Russia" (Liebig 1999:23-28).

The European particularly the Turkish viewpoint on the changing dynamism of the United States foreign policy towards the Central Asian Region is an important addition ebbs and flows of such a policy. In particular, a seminal work in the Turkish Journal of International Affairs (2006) provides a useful framework that connects the states and the non-state actors (here this term refers to the oil companies) and links policy outcomes to their interactions. As this study argues, the focus of both states and non-state actors was on the competition over the oil routes. It goes on to point that two different school of thought can be used to understand Caspian energy politics since mid 1990. These are referred to as "Oilers and Gamers."

- The 'gamers' and
- The 'oilers'
The gamers focus on states as players, while oilers focus on the role of non-governmental actors, namely the oil companies (Yazdani 2006:51-60). The Central Asian Region due to its geographic location makes all the competing economies maintain their grasp in the regions. One former Russian Deputy Prime Minister reminded Washington that Moscow views the Central Asian Region as United States views Latin America as a backyard where no strangers are allowed (Ruseckas 1998:41-46). Evidence also point to the fact that the former President Putin put his relations with the Central Asian Region as number one on his foreign policy agenda. For instance a special presidential representative for Caspian Affairs was appointed by Putin to conduct a strategic study of the Russian policy in the region and to facilitate association of major Russian energy companies like Luke Oil, Gazprom and Yukos to expand Caspian resources. Russia's efforts to make a stronger hold in Central Asia's potential energy reservoir sent an alarming signal to the United States (Heslin1998: 12-16). For example, some argue that “In the energy area Russia has used its pipeline monopoly as a foreign policy tool to thwart Caspian Energy Development” (Yazdani 2006:51-60). As a result, Washington's purpose to prevent Moscow from making its mark in the Caspian region became public in the mid 1990's In 1997, Edward Shirley, a CIA analyst, insisted that the United States must ensure that the Russian power stays out of the Central Asian Region and also their oil and gas assets. Restraining Iran from extending influence in the Central Asian Region must also form one of the distinguishing features of the United States energy policy (Iran is a member of the organisation of petroleum exporting countries (OPEC) that borders the Caspian and Central Asia and is also the only Middle East oil exporter). Thus it has become clear that the gamers suggest breaking the Russian grasp on Central Asian oil export as central aspect of US policy (Yazdani 2006:51-60).

This can be further established by the statement of Jan H. Kalicki, former counsellor to the US State Department of Commerce and US Ombudsman for Energy and Commercial Cooperation in 1998:

“The US government steadfastly opposes the transit of Caspian oil and gas through Iran. We welcome signs of positive change in Iran, and we will seek to encourage future change. But when it comes to energy a commodity on which our
economies depend, we must look to our overriding security needs and remember that Iran is a competitor of the Caspian states, not a partner. On gas, for instance, Iran has set its sights on the growing markets of Turkey, Europe and Pakistan the same markets sought by Turkmenistan. At the risk of stating the obvious, it does not strike me as a smart business decision to run pipelines through the territory of a major competitor” (Kalicki 1998: Online:web).

Similarly, in the Congressional testimony on March 31, 1998, the then Deputy Secretary of State, Strobe Talbot warned that Washington would continue to caution nations throughout Central Asia and the Caucasus against developing close relations with Tehran. He said: “As a state sponsor of terrorism and a nation bent on the development of weapons of mass destruction, Iran still poses a threat to all its neighbours, and that “We are against any state in the region being allowed to dominate the region, politically or economically”(US Congress, 105th Session 1st, Senate, Committee on Foreign Relations, Subcommittee on International Economic Policy, Export and Trade Promotion, Hearings, “US Economic and Strategic Interests in the Caspian Region: Politics and Implications”). Elizabeth Jones, Assistant Secretary of State for Europe and Eurasia, in the same hearing stressed the need to “guard against dependence on Russia and also prevent dependence on Iran, which would have an interest in controlling Caspian oil because it is a competitor in the oil market” (Ibid).

On the other hand, ‘oilers’ believe that it is the oil companies which stimulate their respective governments in order to formulate policies regarding oil and gas. The American scholars such as Robert Ebel, John Roberts and Rosemarie Forsythe have articulated this school of thought. They argue that it is the oil companies which are major forces behind the exploitation of new pipelines from the Caspian Region as they possess the necessary technology, capital and project organising capital. The oil companies have been competing fiercely to sign production sharing agreements for the remaining Caspian oil fields, and to comply with deadlines for exploration and development. Since the competing oil companies of China, Turkey and Russia are state-owned unlike the United States, it puts tremendous pressure on the White House to have focused policy towards the region in order to de-hyphenise these competitors and secure their interests in the region (Ibid :55).
It is evident that the US is an energy importing country, and as such its dependence on foreign oil directly affects its economy. Therefore any degree of constraint in oil supplies affects numerous economic actors in the US such as the consumers and the transnational oil companies. The expected tightness of oil market due to political reasons also acts as a constraint to the US and forces it to devise a diversified energy supply plan. These policy plans become part of the larger oil policy that would ensure availability of oil at reasonable prices by gaining physical access through production and transportation from different part of the world.

In a Hearing held by the US Congress on policy goals (US 110th Congress, Session 2nd, Senate, Committee on Foreign Relations, Hearing, “Oil, Oligarchs and opportunity: Energy from Central Asia to Europe”, 12 June, 2008) regarding energy sources, the promotion of American energy security by encouraging the East-West pipeline that does not transit Iran and denying Iranian leverages over Kazakhstan and Turkmenistan was noted as a primary concern. As stated by the former Deputy Secretary Strobe Talbot the US sought to discourage any one country in gaining control over the critically important oil rich region such as countries in Central Asia. The post Cold War US foreign policy reflected these varied issues to a significant degree, especially with regard to the newly independent countries of Central Asia.

The challenge to develop a policy framework that would take into account US interest in terms of national security, economic prosperity and sustainable global environment connected American policy thrust to the Central Asian Region. In the post Cold War period, the drive for increasingly diversified energy supply mandated a formal recognition of the role that Central Asian nations would play. Such an approach also recognised that the pattern of energy sector investment would significantly influence the future political and economic independence of the region. As noted by the analysts, such an investment could hasten or delay Central Asia's emergence as major petroleum producer and thereby compete with the Gulf region in international oil and gas market. It was also increasingly clear that the US dependence on "foreign oil" would be a major driver of its policy
towards this region. Apart from this, it would also enhance the American business opportunities in Central Asia.

Since the Energy statistics from Turkmenistan and Kazakhstan suggest that their oil and natural gases reserves give credence to the new direction in US approach. Kazakhstan for instance possesses the highest (estimated) 85 billion barrel of oil reserves followed by Turkmenistan with 32 billion barrel of oil. According to an estimate by the U.S. Department of Energy (2002) the Central Asian Region had 16-32 billion barrels of proven oil resources and another 206 billion barrels of possible oil reserves, 236-337 trillion cubic feet of possible gas resources. By contrast, the Gulf proven oil reserves was about 600 billion barrels. Clearly, these two countries are in the forefront of US strategy towards Central Asian Region. In other words, US approach suggests a Kazak- Turkmen centric policy, due to the implicitly calculated benefits from such a focus. Moreover during the last five years it has become evident that the American approach has both commercial as well as geopolitical aims and objective towards these two countries. As testimony by Daniel Fried, Assistant Secretary for European and Eurasian Affairs highlights, that these two countries could play significant role in the region both commercially as well as geopolitically.
In an attempt to study "US Energy Policy towards Kazakhstan and Turkmenistan" the following hypotheses and methodology have been taken into account:

**Hypotheses**

- US energy policy in Central Asia is based on long-term response to politico/security and energy development in the region.
- US energy policy towards Kazakhstan and Turkmenistan is driven by larger strategic and economic considerations.
- Kazakhstan and Turkmenistan have inherent interests in allowing the increased US presence in their respective territories.

**Research Method**

Data collection has been based on primary and secondary sources. Primary sources such as Government publications, especially US Congressional Hearings and Reports have been extensively consulted. In addition, relevant reports from US Government Accounting Office, GAO, USAID, and Department of State and Defense have been widely used to buttress arguments made. In addition, several leading experts view both from the academia and think-tanks have been studied with a view to obtain a clear framework for the study.
Review of Literature

In an endeavour to analyse “US energy policy towards Kazakhstan and Turkmenistan” the various literature on the subject has been taken into consideration along with the governmental source. The existing literature on themes relating to energy security is both general and region specific. Several Congressional Hearings, Task Force Reports, and various governmental publications from Central Asian point of view are also included in this survey. Since energy issues are pertinent to business community, environmental groups, general public and policy makers alike, a good deal of contemporary debate has reflected their interest. The relevance of the topic under research is authenticated by the fact that substantial research papers, global think tank researches and policy analysis are examining the international development relating to energy supply in great detail. In particular, literature focusing on US approach highlights the fact that its strategies and policies would have a decisive impact on world energy scenario.

Linkages between Energy and National Security: The welding of geopolitical strategic interest and energy supplies has been focused on by the studies since the 1980s. For instance, Trverton, Georgoy (1980) has highlighted the possible use of oil as a political weapon after the 1973 oil embargo.

Increased Demand of Oil and Gas for the United States Economy: It is also a theme that has been the focus of several studies. The United States economy is exploring the increasing demand for energy because the domestic supplies are perceived to be shrinking; the United States has become more dependent on oil from abroad. The crucial link between the oil and national security which was solely the concern of military and government officials has become a matter of public discourse. It was during the Second World War that the United States began to perceive that oil shortage may affect its security. Accordingly the first serious effort to fashion a coherent national policy for the supply of foreign oil with geographical focus towards the Persian Gulf became evident. In his book, Michael Stoff (1980), focused on the substantial national effort to devise and put into effect
a set of principles to guide government policy towards the overseas operations of private oil companies in the US.

**Central Asia: A New Destination for the United States:** Several analysts have observed that the Central Asian region has emerged as a new destination for the United States as its energy needs continue to grow. Since the American government has given the petroleum industry the mandate "Go abroad and find oil as a protection to the American and national defence," the Central Asian Region seems to serve the mentioned purpose. This is evident in Levy Charles Vander's book (2000). American oil companies carried the search for oil to practically every country, even to remote corners of the earth despite great obstacles and hardships.

**Central Asia and the New Great Game:** With the growing competition in order to make a consistent supply of oil and gas between the major energy consuming nations the concept of the New Great Game has come into existence. "Great Game" is a competition for influence, power, hegemony and profit in Asia. Here the greater focus has been towards energy politics and the competition for oil and gas of the region by linking political and economic influence. In his article, Edward Mathew (2003) has viewed the whole question of pipeline access to reserves-what route should they take, who should be responsible for their construction and safety, who charges and who profits from them and the composition of the consortia and firms responsible for this is seen as a whole subjection a new great game hypothesis.

**Debate in the US Congress:** In the 108th Congress debate over energy efficiency programmers focused on the budget, oil and natural gas. The Central Asian Region has been viewed by the American policymakers as one of the alternative sources for its energy requirement.

**Impact of the US-led War on Terrorism:** The September 11, 2001 attack on the World Trade Centre and Pentagon changed priorities of US policy towards security and prosperity. It underlined the connection between the oil and politics. It impacted the oil market, particularly when it was confirmed that 15 out of 19 hijackers involved in the attack were from Saudi Arabia which had one-fourth of
the world’s total petroleum reserves. Saudi Arabia as a major power in the Organisation of Petroleum Exporting Countries (OPEC) can control the global prices and supply of oil which make the US vulnerable. In order to remove its vulnerability, the United States has attempted to look for an alternative for its energy requirement through Iraq and Central Asia. Rama Sampath Kumar in his article (2004), has observed that the tragedy of September 11 broke old barriers and opened new horizons.

**US Policy towards Kazakhstan:** The US was the first country to recognise Kazakhstan, on December 25, 1991. US foreign direct investment (FDI) was 27 per cent of the total FDI in Kazakhstan in 2006. American companies have invested about $11.8 billion in Kazakhstan. Since 1993, these companies are concentrated in the oil and gas, business service, telecommunication and electrical energy sectors US Department of State 2006, Bureau of South and Central Asian Affairs.

**US Approach towards Turkmenistan:** During their April 23, 1998 meeting in Washington, Presidents Clinton and Niyazov agreed to expand cooperation between the United States and the Republic of Turkmenistan to promote its development as a market democracy. Presidents Clinton and Niyazov agreed on the importance of rapid development of Caspian energy resources and efficient export routes to world markets to promote regional development concessions to US companies to deeply engage in these activities, strengthening east-west routes in the Eurasian transport corridor, and support for practical steps to develop a trans-Caspian pipeline as part of a multiple pipeline network formed the basis for a nascent partnership, Croissant, Michael P. Aras, Bülent,(1999).

**US Interests in Central Asia:** US interests in Central Asia are primarily strategic. They derive first from the proximity of the area to Russia, Iran and China. The US and West in general find themselves increasingly dependent on the continued stability and development of the Central Eurasian Region. The future of the Central Asian Region has a considerable bearing on the development of the global War on Terrorism along with the US security interests in Eurasia; the maintenance of access to airspace and territory in the heart of Asia; and the
development of alternative sources of energy; and the furthering of democratic development, Blank, Stephen J. (2007)

Strategic Emergence of Central Asia: Central Asia, after its strategic rebirth, has been attracting close international attention. The region today finds itself in a stage of revivalism both in terms of external interest and internal potential. In his article Stobdan, P. (2004) has highlighted the fact that the region's strategic reemergence is compelling everyone to think who will control the region next.

Regional Energy Security Cooperation and Geopolitics: From the bulge of Africa to Indonesia via West Asia, Central Asia, South Asia, Southeast Asia, have been of vital interest to the Western powers, since time immemorial for multiple reasons. Situated at the junction of three continents, namely Asia, Africa and Europe, provides linkages over land and across the sea between Europe and the Indian subcontinent on the one side, and Africa and India on the other side. It offers the shortest and cheapest trade and transit routes between West and East. It commands a vast reservoir of oil about 60 per cent of the world’s proven reserves of oil which enormously contributes to the affluence of the Western world, especially the United States, Cummings, Sally N. (2003).

Central Asia and Diversification of Energy: Central Asia has been acknowledged as the significant region to diversify energy supplies to Europe and the United States. The development and diversification of the Central Asian energy sector is a critical component in the US broader strategy. It has been the primary concern of the US government to create multiple economic linkages that increase the independence of the Central Asian states and introduce market principles to the regional energy market Mathies, Klaus (2006). The US government is therefore working to facilitate multiple oil and gas export routes, including trans-Caspian routes, to increase the region’s stability and prosperity. Richard Boucher, Assistant Secretary of State for South Asia and Central Asia in statement before the House Committee on Foreign Affairs, (April 8, 2008).
Central Asia and the New Great Game: With the growing competition in order to make a consistent supply of oil and gas between the major energy consuming nations the concept of the New Great Game has come into existence. “Great Game” is a competition for influence, power, hegemony and profit in Asia. Here the greater focus has been towards energy politics and the competition for oil and gas of the region by linking political and economic influence. In his article, Edward, Mathew (2003) has viewed the whole question of pipeline access to reserves-what route should they take, who should be responsible for their construction and safety, who charges and who profits from them and the composition of the consortia and firms responsible for this is seen as a whole subjection to a new great game hypothesis.

Global Cooperation within the Oil and Gas Industry: Apart from the ever increasing competition in the energy sector, it is also observed that there is emerging cooperation within the oil and gas industry. This positive change can be attributed to the fall of the Berlin Wall, which has a strong influence of three powerful forces-

- Globalisation
- Liberalisation and
- Technology

In this setting the question of global cooperation would generally mean to safeguard the interest of the host nation, companies and visiting companies, OPEC Bulletin (2006).

The Prospect for Multilateral Conflict Prevention and Regional Cooperation in Central Asia: Central Asian States suffer from the perception that they do not share any or few security threats that could justify a regional security constellation that would de facto infringe on the sovereignty of the States. In his article Swnastrom, Niklas (2004), focused on the regional and international attempt for cooperation. He also discusses on the efforts of organisations towards conflict prevention and crisis management in the region.
Historical Overview of Central Asia: The historical background of the Central Asian Region is also important in order to understand the present policy nuances. In most Central Asian Republics, after independence political power was transferred from Moscow to the local autocratic ruler. Hence, there is minimal political participation in Central Asian countries. Several studies point out that the new states of Central Asian Region suffer from political instability because of their ethnic imbalance. Manz, Beatrice F. (1985), in her book has dealt with the historical perspective of Central Asia. She mentioned that Soviet authorities demarcated the Central Asian Region in a way that made each state a certain number of different ethnic groups. In addition to this, the immigration of Russian and other Europeans as well as deportations subsequently compounded the ethnic diversity which further led to the divided political entities.

Natural Gas of Central Asia: The Issue of Export Troubles: The issue of natural gas exports from the Caspian Basin is equally complex and difficult as the oil pipeline routes. Blank, Stephen (2007), says that it is important to mention that only Russia, through Gazprom, has managed to profit from its position as the largest recipient of gas exports from Central Asia because it has managed to buy Central Asian gas at prices as low as one-quarter to one-third of market prices in Europe and then resells gas at market rates.

Presence of US Oil Companies in Central Asia: The Central Asian countries also have the inherent interest in the US involvement in the region. According to this perception, the US military presence will protect the CAR region from Russian dominance, Chinese and other powerful neighbouring countries' encroachment. Though the countries are rich in natural resources, but because of the lack of technological know-how and foreign investments they are unable to use the reservoir of oil and gas. Since the United States is making huge investment in the region it is proving a boon for them. Six oil giants - Unocal, Total, Chevron, Pennzoil, Amoco and 'Exxon have invested heavily in enormous hydrocarbon potentials of the CAR. Resizade, Alee (2002).

Energy as ‘Security’ Issue: Mathew Maavak in his article "Globocops of Energy Security" increased competition over energy resources may also lead to the
formation of security compacts to enable an equitable distribution of oil and gas between major powers. However, this may happen at the expense of less developed economies. The Group of five, precursors to the G8 first met in 1975 to coordinate economic and energy policies in the wake of the 1973 Arab oil embargo, a rise in inflation and a global economic slowdown.

NATO leaders meeting in Bucharest in April 2008 may discuss the possibility of using the military alliance "as an instrument of energy security." One of the possibilities includes placing troops in the Caucasus region to police oil and gas pipelines, Guardian, March 10, 2008.

Geo-Strategic Dimension of Kazakhstan at the Eve of Global Peak Oil:
The term ‘peak oil’ simply means that running out of cheap oil or easy oil. Thus, it is argued that ‘global peak oil’ issue has served as an additional dimension to geo-strategic significance of world’s remaining untapped oil resources. In that regard, it is asserted that Kazakhstan, which has massive untapped oil reserves with its little domestic consumption and growing export capacity, has become the focal point of strategic rivalries between the United States, Russia, and China. Clearly, Kazakhstan’s land-locked positioning at the heart of Central Asia has stimulated these rivalries (Robert, Legvold: 2003).

Balancing the Iron Triangle: It has been noted by James M. Cypher (2002) that the “Iron Triangle” forms the U.S. military establishment’s decision-making structure and includes its major interest groups. One side of the triangle includes the “civilian” agencies that shape U.S. military policy — the Office of the President, the National Security Council, the Senate and House Armed Services Committees, and civilian intelligence agencies like the CIA and NSA. A second side includes the military institutions — the Joint Chiefs of Staff, the top brass of the Air Force, Army, Marines, and Navy, the powerful “proconsul” regional commands (known as “CINCs”), and, in a supporting role, veterans’ organizations like the American Legion and the Veterans of Foreign Wars. At the base of the triangle are the 85,000 private firms that profit from the military contracting system, and that use their sway over millions of defense workers to push for ever-higher military budgets.
This focus on the oil-exporting regions would only rise under the Bush administration. Even though the Bushes never really established themselves in the oil industry, their tilt toward “big energy” is unmistakable. George W. Bush’s number-one corporate donor was Houston’s Enron Corporation, the ill-fated energy trader; Vice President Dick Cheney comes fresh from his job as CEO of Dallas’ Halliburton Corporation, the world’s largest oil-well service company; and Condoleezza Rice served as a Director of the Chevron Corporation before becoming National Security Advisor.

Oil Companies as Interest Groups: U.S. Operatives, Oil Companies and Al Qaeda in Azerbaijan: Peter Dale Scott (2005) has noted that in one former Soviet Republic, Azerbaijan, Arab Afghan jihadis clearly assisted this effort of U.S. oil companies to penetrate in the region. In 1991, Richard Secord, Heinie Aderholt, and Ed Dearborn, three veterans of U.S. operations in Laos, and later of Oliver North’s operations with the Contras, turned up in Baku under the cover of an oil company, MEGA Oil. This was at a time when the first Bush administration had expressed its support for an oil pipeline stretching from Azerbaijan across the Caucasus to Turkey. MEGA never did find oil, but did contribute materially to the removal of Azerbaijan from the sphere of post-Soviet Russian influence.

At stake was an $8 billion oil contract with a consortium of western oil companies headed by BP. Part of the contract would be a pipeline which would, for the first time, not pass through Russian-controlled territory when exporting oil from the Caspian basin to Turkey. Thus, the contract was bitterly opposed by Russia, and required an Azeri leader willing to stand up to the former Soviet Union.

Neighbouring Scenario Influencing US policy Towards Central Asia In General and Turkmenistan in Particular: Central Asia is caught in tough neighbourhood. Keeping in mind the enormous natural resources of Central Asia it is observed that the US policy makers can not remain ignorant towards it especially after the September 11, 2001 attack on World Trade Central and Pentagon. In order to prevent the immediate neighbour of the countries of CAR it is inevitable for US
to develop consistent and coherent policy towards it, Nichol, Jim (2005). It can be observed that China has stepped into the CAR the firm objective to diversify the natural resources of CAR and thereby fulfil its energy demand. This is evident by the fact that the Chinese National Petroleum company signed an agreement with Turkmengaz, Turkmenistan’s National gas company to purchase 30 billion cubic metre of Turkmen gas to export to China in 2009, Goldstein, Lyle (2005).

European Union has considered Turkmenistan as key destination to fulfill its future energy requirement especially for its Nabucco gas pipeline, Eurasianet, Online Web (2009).

The Issue of Promoting Multiple Export Route: The US government has promoted the development of multiple pipelines and diversified infrastructure networks to open and integrate these countries into the global market and to foster regional cooperation. In this regard, commercially competitiveness was further emphasised. Keeping this in mind the Baku-Ceyhan pipelines was firmly endorsed. Further It was decided to support the continued Russian participation in the Caspian and Eurasian corridor. Moving in this direction further US companies are working in partnership with the Russian firms in the Caspian. Lastly the US Government opposes pipelines through Iran because the development of Iran's oil and gas industry and pipelines from the Caspian Basin through Iran will seriously undercut the development of east-west infrastructure. Apart from this, it will also give Iran improper leverage over economies of the Caucasus and Central Asian States, 105th Congressional Hearings (1998).

US Energy Policy Making: US law is formulated in Congress and is implemented by the Bureaucracy, but their process of decision making differs. In other words, it can be said that the institution setting greatly influences the policy outcome. Congress is considered a crucial component of the “iron triangle”. The President is very often dominated by the Congress. It is the Congress who legislates on energy policy and raises the resources to underwrite it. The President’s freedom to act independently of Congress on energy matters is limited severely by law, custom and political circumstances. Policy may even be formulated by judges or administrators by interpreting or implementing a

**US Investment Policy Towards Kazakhstan:** The US was the first country to recognise Kazakhstan, on December 25, 1991. US foreign direct investment (FDI) was 27 per cent of the total FDI in Kazakhstan in 2006. American companies have invested about $11.8 billion in Kazakhstan since 1993. These companies are concentrated in the oil and gas, business service, telecommunication and electrical energy sectors. US Department of State, Bureau of South and Central Asian Affairs February, 2007.

**Strengthening Energy Ties between the US and Kazakhstan:** In the words of US Secretary of Energy Samuel W. Bodman observes, “Kazakhstan has a critical role to play in advancing global energy security, especially in this region and we look forward to work with them to expand energy infrastructure and promote a transparent and stable investment climate that attracts foreign investors” (US Department of Energy, 2006). Kazakhstan is geopolitically located near the northeast portion of the Caspian Sea and claims most of the Sea’s biggest known oil field. Kazakhstan’s combined onshore and offshore proven hydrocarbon reserves have been estimated between 9 and 40 billion barrels (comparable to OPEC members Algeria on the low end and Libya on the high end). The country is no longer a minor world oil exporter as it was during the late 1990s, and it is poised to become an even more significant player in the world markets over the next decades. The total investment level in Kazakhstan’s oil and gas Company is expected to rise from $3.8 billion for 2003-2005 to 16.8 billion for 2011-2015.

**The Prospect for Multilateral Conflict Prevention and Regional Cooperation in Central Asia:** Central Asian States suffer from the perception that they do not share any or few security threats that could justify a regional security constellation that would de facto infringe on the sovereignty of the States. In his article Swnastrom, Niklas (2004), focused on the regional and international attempt for cooperation. He has also focused on the efforts of organisations towards conflict prevention and crisis management in the region.
The Dynamics of Increased Oil Prices: In the opinion of Lenardo Maugeri, "Not in Oil’s Name", (2003), the prices of crude oil are high these days not because oil reserves are waning. In fact, they are plentiful but because inadequate refining capacity has limited the quantity of crude available on the world market. And high prices come with an upside: they could convince the oil industry to invest in new capacity. Widespread fears of waning oil reserves are obscuring the real reasons for the cost of crude oil today. The truth behind high prices is mundane: they are the result of extreme economic processes, not geological limitations. The current "crisis" is being driven by the reduced availability of crude on the world market and the inadequacy of the oil industry's refining capacity. Both conditions were brought on by years of low oil prices, inadequate investment in infrastructure, and producers' fears of surpluses. Since 2003, the situation has been exacerbated by an unexpected increase in the global consumption of crude Barnes, J. (2002).

US Grand Strategy Towards Central Asia: Barry R. Posen (2007), in his paper "Stability and Change in US Grand Strategy," has analysed that since the Global War on Terror (more recently termed the Long War) emerged as the centrepiece of US grand strategy in 2001, the post–Cold War US debate has narrowed significantly. Essentially three alternative strategies now compete for pride of place. Two are variants of a "primacy" strategy; one is a variant of "restraint," sometimes termed "offshore balancing." All three strategies take globalization as a given and as a positive development. None specifically connects US military power to globalisation. To the extent that globalisation can be argued to have negative consequences, restraint offers a different remedy than either version of primacy. This article offers a brief characterisation of globalisation and speculates on its positive and negative results. The three grand strategies that remain visible in the US public policy debate, and their suggested remedies, are then discussed. Finally, the US military strengths and weaknesses are evaluated in order to gauge which strategy's remedies are most feasible.

US Assistance to Kazakhstan: According to the Department of State US foreign direct investment (FDI) was 24.6 per cent of total FDI in Kazakhstan in the
first half of 2007. American companies have invested about $14.3 billion in Kazakhstan since 1993, Thaisrivongs, David (2004). These companies are concentrated in the oil and gas, business services, telecommunications, and electrical energy sectors. Kazakhstan has made progress in creating a favourable investment climate although serious problems, including arbitrary enforcement of laws, remain. A US-Kazakhstan Bilateral Investment Treaty and a Treaty on the Avoidance of Dual Taxation have been in place since 1994 and 1996, respectively. In 2001, Kazakhstan and the United States established the U.S.-Kazakhstan Energy Partnership, Overland, Indra, Kjaernet Heidi and Taylor, Andrea Kendall (2009).

**Regional Integration Initiatives:** Kazakhstan has been the first Central Asian State to develop and secure NATO approval for the Individual Partnership Action Plan, which has helped Kazakhstan gain a better understanding of NATO’s role and purposes. Further, as analysed by Liebig (1999) its participation in ordnance disposal efforts in Iraq has improved the Kazakhstan’s military’s interoperability with the US forces. Kazakhstan has shown great commitment to military modernisation, both of equipment and doctrine, in Central Asia. The United States firmly supports and maintains the expanding Central Asia’s ties to the Euro-Atlantic community, while also looking for new opportunities to the South. The creation of the State Department’s Bureau of South and Central Asian Affairs reflect this expanded view. Institutions such as NATO and the Organisation for Security and Cooperation in Europe and the United States are enhancing new ties and synergies with nations of the south.

**US-Kazakhstan: The Broader Relationship:** The United States has a long-term interest in Central Asia. In addition to this, the US’s strategic goal for the countries of Central Asia, including Kazakhstan, is to support their development as fully sovereign, democratic, stable and prosperous nations contributing to regional stability and the global war on terrorism and potentially serving as models of ethnic and religious tolerance. The US relations with the five countries of Central Asia rest on three pillars: security, economic reform and development including the oil and gas sector and democratic reform. Kazakhstan is one of the premier performers in the former Soviet Union on the first two pillars,
but needs to move forward on the democratic reform plans. The best guarantor of Kazakhstan’s future is a prosperous, stable and democratic society where all have a stake in the political system. The United States and Kazakhstan enjoy a vigorous strategic partnership with a constant stream of high level visitors. Energy Secretary Bodman met President Nazarbayev and Energy Minister Izmukhambetov, Vice President Cheney met the President Nazarbayev, and Secretary Rice saw Foreign Minister Tokayev and Agriculture Secretary Johanns visited Kazakhstan on an agricultural trade mission. The US optimistically hopes that this trend continues. The United States is assisting Kazakhstan to combat threats arising from narco-trafficking, terrorism and all smuggling of contraband, including weapons of mass destruction by building up Kazakhstan’s rapid reaction capabilities. The US funded border security training programme recently donated three 42-foot patrol boats to the maritime boarder guards. In addition to this, security assistance programmes offered by the US are enabling the refurbishment of facilities at the maritime academy in Aktau, and the US maintain a robust programme of engagement to ensure that Kazakhstan has the capability to monitor and manage its land and sea borders. Kazakhstan is also trying with the US assistance to refurbish Huey helicopters for use as part of its rapid reaction forces, Cornell and Swanstrom (2006).

**US Approach Towards Turkmenistan:** During their April 23, 1998 meeting in Washington, Presidents Clinton and Niyazov agreed to expand cooperation between the United States and the Republic of Turkmenistan to promote its development as a market democracy. Presidents Clinton and Niyazov agreed on the importance of rapid development of Caspian energy resources and efficient export routes to world markets to promote regional development concessions to US companies to deeply engage in these activities, strengthening east-west routes in the Eurasian transport corridor, and support for practical steps to develop a trans-Caspian pipeline as part of a multiple pipeline network formed the basis for a nascent partnership, Nichol, Jim (2007).