The European Union (EU), as the world’s second-largest energy consumer after the US, considers energy as a political priority while most of the EU’s oil needs have historically been supplied by the Middle East (ME) especially the Persian Gulf (PG). The EU which faces geopolitical effects of its growing dependence on external energy, specifically gas as a preferred energy mainly from Russia and North Africa, does not yet have all the means possible to change the international energy market.

International strategic importance of PG energy, specifically its huge natural gas resources with 45 percent of total proven world gas reserves, and also its geopolitical consequences as well as EU energy supply policy has encouraged this union to consider an extensive access to PG security and adopt greater geopolitical role in this waterway. Besides EU’s vulnerability to volatility of oil prices and also its growing dependence on imported energy, the EU faces the US and the Asian-Pacific (AP) region energy, political, economic and military policies in the PG. Consequently, the EU as an emerging global superpower considers all means of insuring its energy security policy in the PG region.

THE EU CHALLENGES

The PG as the main dominant energy source and gateway for global energy in the future, in 2003, had about 27 percent of the world’s oil production, while holding 57% (715 billion barrels) of the world’s crude oil reserves. Besides oil, the PG region also has huge reserves (2,462 trillion cubic feet- Tcf) of natural gas, accounting for 45% of total proven world gas reserves.¹

The 1970s oil shocks developed the concept of “energy security” and with the Soviet withdrawal from Afghanistan and glasnost, the end of the Cold War and also the crisis of Iraq invasion to Kuwait in 1990, US security policy found the great opportunity to be stabilized in the region.²

Such great geopolitical changes of regional security, along with Operation Desert Storm paved the way for the “Bush doctrine” and his “new world order” on the basis of the US hegemony and provided the possibility of US control and access to oil reserves of the southern littoral states of the PG; this has been extended to Iraq since its occupation in 2003. Although the US has formed its importing energy strategy on decreasing dependency on the PG and safeguard
almost 58% of the total oil demand mostly from Canada, Venezuela, Nigeria and Mexico, Washington has increased its presence in the region and its efforts for controlling the oil vent pipe from this area. The US by its military superiority and applying a unipolar security system in the region could also impart geopolitical consequences of growing demand for abundant and low price oil and natural gas of the PG as a critical prerequisite for Japan and EU growth and increasingly for the industrial growth of Asia and much of the developing world. In addition, with domestic production in decline the US will become ever more dependent on imports from the PG. (See figure-1)

Figure -1

![U.S. Crude Oil Imports by Source](http://www.eia.doe.gov/emeu/cabs/usa.html)

Besides, the EU --like the US-- endures the steady increase of AP region oil and gas demand from the PG which is already more than Europe and the US merged together. This is according to Geoffrey Kemp and Robert Harkavy (1997:120) “a most significant statistic and one that will have a profound impact on the geopolitics of the region.” and certainly an effective impact on EU and US energy security policies.

The AP region is the world’s fastest-growing energy consumer and in the next two decades is expected to become the biggest world energy consumer; by 2010 it will account for about 95 percent of its energy needs from the ME.

The energy security concerns and challenges within the AP, especially all those relating to the ME/PG, could have a profound impact on the geopolitics of the latter region, whilst the West’s, particularly the US, dependence on oil imports from this region is also growing.
Mahboubeh Sadeghi-Nia

The AP, to ensure energy supply security from the PG, like the EU, prefers its independent geopolitical role from the US in PG security. Geo-economic factors have assisted proper and closer political, economic, military and security relations of the AP with the energy producer states in the PG, therefore wider strategic interdependency has been created.

The vital interest of the AP regarding enough and safe energy supply from the ME/PG has increased the concerns of the Western dependent countries, including EU, on this region's energy.

EU ENERGY SUPPLY POLICY

The EU was shaped as the European Economic Community (EEC) to improve economic and political integration within Europe. Its foundation was based on compacts about energy matters -- the European Coal and Steel Community-- established after World War II. Hence energy, as a political priority for this union since its inception, has played a major role on its existence and future.

Western Europe shifted from native coal to cheaper imported oil after World War II. While according to the Energy Information Administration (EIA), “EU members possess only about 0.6% of the world’s proven reserves of oil and 2.0% of the world’s natural gas reserves. (See Table 5-1) However, the EU holds 7.3% of proven coal reserves, (...). In 2001, the EU produced 4.1% of the world’s crude oil, 9% of the world’s natural gas, and 11% of the world’s coal. (See Table 5-1)"
The EU, which consumes 18 percent of total world oil, is responsible for less than [about] 4 percent of world production (Kemp and Harkavy 1997: 119) it also consumes 16% of the world’s natural gas. “Under current patterns of energy production and energy use, the European Union is consuming limited reserves at a rate that compromises the availability of energy to future generations and threatens the local and global environment.”

(See table 5-2)

### Table 5-2

<table>
<thead>
<tr>
<th>Energy Type</th>
<th>OECD Europe</th>
<th>EU-15</th>
<th>EU-25*</th>
</tr>
</thead>
<tbody>
<tr>
<td>Petroleum</td>
<td>40.7%</td>
<td>43.1%</td>
<td>38.4%</td>
</tr>
<tr>
<td>Natural Gas</td>
<td>22.7%</td>
<td>23.5%</td>
<td>22.6%</td>
</tr>
<tr>
<td>Coal</td>
<td>16.3%</td>
<td>13.5%</td>
<td>18.5%</td>
</tr>
<tr>
<td>Net Nuclear Electric Power</td>
<td>12.5%</td>
<td>13.9%</td>
<td>14.4%</td>
</tr>
<tr>
<td>Net Hydroelectric Power</td>
<td>6.4%</td>
<td>4.4%</td>
<td>5.8%**</td>
</tr>
<tr>
<td>Other</td>
<td>1.4%</td>
<td>1.5%</td>
<td>0.3%</td>
</tr>
</tbody>
</table>

Note: Other includes net geothermal, solar, wind, and biomass (wood and waste) electric power.

* in 2000 (Eurostat data); ** all renewables

http://assembly.coe.int/Documents/WorkingDocs/Doc05/EDOC10458.htm
The European Union’s dependence on energy imports has been increasing constantly, while European oil production, especially from the North Sea fields, is dropping. The EU imports 50% of its energy requirements, and with central and eastern European countries joining the Union, it will become more significant. According to a report published by the European Commission, two-thirds of the EU’s total energy requirements will be imported by 2020. While the EU Commissioner for Energy, Loyola de Palacio, anticipates the EU to import 90% of its oil and 70% of its natural gas by the year 2020.

Most of the EU’s oil needs have historically been supplied by the Middle East. In 1992 almost 4 mb/d—more than 25 percent of total ME oil production—were exported to the European continent. (Kemp and Harkavy 1997: 119) In 1999, OPEC countries supplied 43% of EU oil where 30% of those came from the (PG). Therefore, by 2020, the Energy Commission’s Green Paper of 2000 expects OPEC to cover as much as half of the EU’s energy needs, compared to about 40% at present.

A similar dependence has developed with regard to gas. In the next decades, gas use will increase most rapidly due to environmental concerns and the phasing out of much of the EU’s nuclear energy capacity. Europe uses natural gas for 22% of its energy needs with over 90% of its total gas imports coming from just three sources—Russia, Norway and Algeria. Russia contributes 25% of Europe’s natural gas imports.

Russia’s increasing geopolitical importance as a source of different energies—oil, natural gas and electricity—and the largest energy supplier outside of OPEC has encouraged Moscow to ensure its position as a major energy importer to Europe and dominate Europe’s markets as well as to support its domestic and foreign policy objectives.

Hence, the geopolitical dimension of the EU’s growing dependence on gas and oil imports is considerable. “Future imports of fossil fuels will tend to come from increasingly distant places with obvious price consequences (...) Such a situation [especially for those countries which are completely dependent on a single gas pipeline linking them to a single supplier country] naturally makes many European countries vulnerable to supply shocks, price oscillation, transport costs and other risks.” In such a situation, “The EU does not yet have all the means possible to change the international market. This weakness was clearly highlighted at the end of 2000 by the strong increase in oil prices.”

The oil shocks of the 1970s demonstrated the largely negative impact on Europe’s economy and society of interruptions to supplies and fickle energy prices. The determinant impact of high oil prices on economic growth and inflation as well as unemployment in the EU also affected Europe’s economic competitiveness. Although such circumstances caused changes in energy markets aimed at reducing dependence on oil, it did not affect the rise in fossil fuel
demand over the previous decades and is not expected to act in this way for the foreseeable future.

EU STRATEGY FOR SECURITY OF ENERGY SUPPLY

To face the two major challenges of the EU, i.e. volatility of oil prices and the growing dependence on imported energy, the Energy Commission's White Paper in 1995 emphasised the importance of a secure energy supply as a prerequisite for the EU's successful economy. Along with the emphasis of the White Paper on security of supply and environmental protection, improving the competitiveness of European businesses was identified as one of its three main objectives. This objective stressed the significance of proper economic and political ties with oil and gas producer countries. So in the geopolitical sense, the EU needed to variegate its energy supplies and suppliers as well as its energy resources.

At present, it seems that the EU is experiencing the same doctrine of the US during President Carter in the 1979 oil crisis, with their intention to implement a more active role in the security of its structural interests in the PG: to link oil market security to geopolitical conditions and a more committed and apparent EU policy, by establishing a military force to react in conflicts with a concentration on crisis-management.

To achieve the EU aims of the White Paper, the necessity of improving a new strategy was highlighted to enhance the energy security in the mid and long term, as was emphasised later in the Green Paper of 2000, by means of:

• the progressive substitution of oil by alternative sources of energy and their technological tools

• an effective demand policy to decrease the energy intensity of EU economies and disconnect the relation between energy consumption and economic growth with respect to a more prominent integration of energy policy within the EU members

• maximizing environmental protection, including energy efficiency, energy saving and climate protection, specifically in domestic activities with respect to the Kyoto Protocol aims of reducing greenhouse gases

• to stabilize the needs of energy supply policy with EU's economic, political and environmental goals, via intervention in the internal market and proper ties with oil and gas producer countries for greater market diversification, better market transparency and adequate supply pacts, and also the greater possibility of effecting on the international market

• power of controlling any challenges for energy supply policy before emerging as a crisis. The EU Brussels agreement of 22nd November, 2004 to create a rapid reaction force (RRF) of a number of units each made up of 1500
troops, to be deployed at short notice to conflicts around the world with concentration on crisis-management, humanitarian relief and peace-keeping tasks independently of NATO is conceivable in this regard.

THE EU AND PERSIAN GULF SECURITY

European Union energy supply policy has encouraged the EU to consider an extensive access to PG security and adopt a greater geopolitical role in this waterway. The EU’s major concerns in this regard are:

- necessity of continued access to oil and gas at predictable and controllable prices, also profitable markets in the PG oil-producer states
- the security of European investments in the PG
- the constant dominance of the PG oil fields coinciding with the descent of older oil fields in Europe and North America
- uncertainty about the accessibility of oil from other major sources in the Caspian Basin, Central Asia, Russia, the South China Sea and China
- increasing global demand for oil and gas because of economic growth anticipation
- more significant trends of oil use in transportation sectors

The EU has common concerns in the PG with the US and has played a supportive role in contributing to the coalition that liberated Kuwait from Iraqi occupation and later toppled the Saddam’s regime, and such relations are likely to be continued in long term policy. Although, regarding some divergence interests with Washington, the EU has been keen to form its own relations with the energy producer states in the PG.

There is no consensus in foreign policy among the members of the EU and each member pursues its own national interests although, “there is still a lingering fear in Europe that the United States will embroil European countries in conflicts that do not involve threats to their vital interests.”

In addition, the PG will remain the main source of EU energy supplies, more than the US, over the next decade, the predominant source to which the AP region will also turn to fill its burgeoning energy demands too. (See figure 5-3) Consequently, the perception is likely to arise that a serious interruption of PG oil supplies would cause severe economic and financial dislocation as well as political and social instability in the developing world, and this in turn could generate pressure for Western military action. 20 This means more US military presence and control over energy routes.
The significance of the PG’s huge natural gas reserves with 45 percent of total proven world gas reserves, has increased the geopolitical importance of the PG. Enumerating the reserves of the Caspian Basin (about 340 Tcf) which raises the figure to nearly 55 percent, would further satisfies EU security perspectives. (See table 5-3)

Table 5-3

<table>
<thead>
<tr>
<th>Country</th>
<th>Proven* Oil Reserves</th>
<th>Possible** Oil Reserves</th>
<th>Total Oil Reserves</th>
<th>Proven* Natural Gas Reserves</th>
<th>Possible** Natural Gas Reserves</th>
<th>Total Natural Gas Reserves</th>
</tr>
</thead>
<tbody>
<tr>
<td>Azerbaijan</td>
<td>1.2 BBL</td>
<td>32 BBL</td>
<td>33.2 BBL</td>
<td>4.4 Tcf</td>
<td>35 Tcf</td>
<td>39.4 Tcf</td>
</tr>
<tr>
<td>Iran***</td>
<td>0.1 BBL</td>
<td>15 BBL</td>
<td>15.1 BBL</td>
<td>0 Tcf</td>
<td>11 Tcf</td>
<td>11 Tcf</td>
</tr>
<tr>
<td>Kazakhstan</td>
<td>5.4 BBL</td>
<td>92 BBL</td>
<td>97.4 BBL</td>
<td>65 Tcf</td>
<td>88 Tcf</td>
<td>153 Tcf</td>
</tr>
<tr>
<td>Russia***</td>
<td>2.7 BBL</td>
<td>14 BBL</td>
<td>16.7 BBL</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td>Turkmenistan</td>
<td>0.6 BBL</td>
<td>80 BBL</td>
<td>80.6 BBL</td>
<td>101 Tcf</td>
<td>159 Tcf</td>
<td>260 Tcf</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>10 BBL</td>
<td>233 BBL</td>
<td>243 BBL</td>
<td>170.4 Tcf</td>
<td>293 Tcf</td>
<td>463.4 Tcf</td>
</tr>
</tbody>
</table>

Sources: Oil and Gas Journal, Energy Information Administration
http://www.angelfire.com/dragon/asi/Caspian_Sea_Region.htm
* proven reserves are defined as oil and natural gas deposits that are considered 90% probable
** possible reserves are defined as oil and natural gas deposits that are considered 50% probable
*** only the regions near the Caspian are included // BBL = billion barrels, Tcf = trillion cubic feet
Natural gas, which is regarded as the preferred fuel for electricity production in the EU is becoming a more and more important source of energy. The EU has more problems with its gas needs than oil. Europe’s increasing preference for natural gas, along with reducing reserves in the North Sea, will give an added encouragement for political efforts already underway to strengthen ties with other major suppliers. Russia and North Africa are the main gas suppliers of the EU but studies of the European Commission which emphasis the increase of Union’s share of energy from foreign sources from about half in 2000 to two-thirds by 2020, confirms the significance of the diversity of gas suppliers for the EU.21

Other EU’s concerns about its diversity of gas suppliers, besides the geopolitical advantages of Russia over the EU’s markets and EU’s deep dependency on Russia’s energy, is the uncertainty about the situation in North Africa,

European security perspectives—especially those of NATO’s southern members—are increasingly influenced by the growing importance of natural gas exports from North Africa. Gas supplies from that region, which continues to be buffeted by political, economic, and social challenges, play a growing role in European Union (EU) economic development and modernization plans. France, Spain, and Italy import a large portion of their energy needs from the Maghreb, and the governments and security establishments in all three of these countries have become increasingly concerned about the possibility that turmoil and conflict in the area might disrupt gas supplies. Such concerns are reflected in increased military planning and preparation on the part of these countries to cope with a potential interruption of North African energy supplies. Indeed, if non-military means were not available or effective, it is conceivable that such a disruption could prompt some southern members of the Alliance to assemble a European-led force and to request NATO support for an emergency response.22

Consequently, the EU has flourished its economic and political ties with all littoral states of the PG to ensure its oil and gas supplies. Since the 1980s the bilateral trade relations between EU and GCC countries have been changed from negative trade balance to positive in favour of the EU. The GCC is the EU’s fifth largest export market, while the GCC is the fourteenth biggest source of imports for the EU.23

The EU was also benefited by Washington’s absence in forming its own independent relations with Iran and Iraq (Iraq until US invasion in 2003) to develop its business and secure its own energy deals, outside of US control.
Iran which contains the world’s second largest natural gas reserves and around 10% of the world total oil resources with its geo strategic location as an entrance to the ME and Central Asian energy suppliers has great potential to satisfy the political and economic needs of the emerging global powers, including the EU.

In spite of the EU’s cooperation with the US in its PG security arrangements, “to counter-balance the combined strength of Iran and Iraq [during Saddam Hussein’s regime], in defense of the GCC states” the EU did not follow the US policy of ‘Dual Containment’ and tried to perform a more flexible policy in this region. Differences, especially over Iran, caused tension between the US and its European allies and weakened Washington’s efforts to isolate Iran. The EU’s disagreement with ‘Dual Containment’ also undermined the effort to maintain international support for US policy toward Iraq during Saddam’s regime. At the same time, EU flexibility modified the hostile sentiments of the region’s people toward the West and provided suitable economic and political opportunities from which the EU benefits.

Hence, the bilateral trade of the EU with Iraq that was interrupted from 1991 to 1996, cultivated following the start of acting on the UN oil-for-food programme in 1997. The EU occupied second place of the main trading partners of Iraq with 33% of Iraq's foreign trade, after the US with 42%. According to the European Commission, in 2001 EU with allocating 55% of Iraq's imports to its market imported mainly energy products from Iraq which accounted for 99.9% of imports. This amount of imports from Iraq contained 2.5% of the EU’s total energy imports, with Iraq being its 9th energy supplier.

Concerning Iran, Europeans as Rosemary Hollis affirms, “see this country as such a significant and powerful player in the Gulf that to attempt to exclude it from a say in regional affairs is to court antagonism” and the EU has been successful in its mediation for Washington-Tehran debates before emerging as a crisis, e.g. Iran nuclear activities.

The EU investments in Iranian projects like the development of South Pars (which ranks as the world's largest offshore gas field is Iran's largest energy project, and already has absorbed approximately $20 billion in investment) have confronted a series of unacceptable choices for the US whether to impose sanctions on these firms and face big risks in its relations with its allies or ignore their activities and face weakening international support for Washington's efforts to isolate Iran.

According to the European Commission, “the EU is Iran's main trading partner concerning both imports and exports. EU exports to Iran have almost doubled since 1999 (…). From 1980 to 2001, EU imports from Iran grew by on average 2.7% per year, and EU exports by 2.5%. (…). More than 80 % of EU imports from Iran are energy related (mainly oil products), representing 3.8%
of the total EU imports in energy products. Iran ranks as 7th supplier of energy products for the EU.\textsuperscript{9,28}

According to the European commission advice for securing EU’s gas supply “by new long-term contracts for imports from third countries”\textsuperscript{9,29} and as it is mentioned in documents of the Parliamentary Assembly of the Council of Europe, to diversify its energy supplies and suppliers in the geopolitical sense, EU in practice is directed to:

...[expand] the energy mix in individual countries, [develop] a closer energy partnership with the Caspian Sea region (as is called for in this Assembly’s Resolution 1324 (2003) on “Europe and the development of energy resources in the Caspian Sea region”) and [strengthen] its long-term energy co-operation with Russia. To support an eastbound partnership (primarily in natural gas but also in oil), major investments in network and interconnection infrastructure, as well as in new transit facilities, are needed for transport from, for example, the Caspian Sea to other parts of Europe\textsuperscript{30}

Iran’s significance in the EU energy security policy, especially security of gas supplies is conceivable in the EU disagreement with the US hostile policy towards Iran, e.g. ‘Dual Containment’. The recent success of a British company in counselling very important gas pipeline of “peace pipe” from Iran to India via Pakistan which was opposed originally by Washington is noticeable.

CONCLUSION

The EU which faces geopolitical effects of its growing dependence on external energy, specifically gas as a preferred energy, has tried to variegate its fossil fuels supplies and suppliers.

While the PG will remain the main source of EU energy supplies in the next decades, the EU for reducing its dependency on energy supplies especially natural gas from Russia and North Africa, has developed its economic and political ties with all littoral states of the PG to ensure its oil and gas supplies.

In addition, the EU as an emerging global superpower is “deeply concerned about the US ‘new order’ in the ME” (Paul Rogers 2005)\textsuperscript{31}, and is not interested in the US plan of ‘The Greater ME’ which is designed for US permanent hegemony in this region. The EU’s difference with the US in dealing with the ME countries, which is rooted in their hidden rivalry to control the strategic region of the ME with major energy reserves, has become particularly obvious with regard to Iran.

The EU which is seeking to originate its own policy in the region especially regarding securing its energy supply, also confronts the steady increase of Asia oil and gas demand from the PG. Besides, Washington’s intense political and military presence in the whole ME/AP regions, China and India political,
economic and military activities, to assure their security of energy supplies, will have a profound impact on the geopolitics of the PG region as well as an effective impact on EU energy security policy.32

Under these circumstances, the EU decision to create a rapid reaction force independently of NATO, in spite of its small and limited forces, seems a starting point for the EU to adopt more significant geopolitical role in the strategic waterway of the PG.
NOTES


2 The concept of ‘energy security’ apparently was started with the decision by Winston Churchill before the start of World War I to convert the British navy power source from coal to oil. His decision took the British government’s demand for a stable supply of oil to interference in Iran.


4 “The ten accession countries will further boost the EU’s resources, but only by small percentages. The exception is coal, where reserves would increase an estimated 41%, using 2001 data.” From, Energy Information Administration (EIA). Regional Indicators: European Union (EU). Retrieved 2 December 2004, from World Wide Web (http://www.eia.doe.gov/emeu/cabs/euro.html#Table2)

5 ibid.


8 The report of European Union Energy Outlook to 2020, op. cit. Energy Information Administration (EIA), (http://www.eia.doe.gov/emeu/cabs/euro.html#Table2)


10 “In 2002, the EU imported 27.5% of its oil requirements from Eastern Europe, mainly Russia, followed by the Middle East (24.6%), Africa (20.5%) and Norway (19.95), according to Eurostat.” From, Op. cit. * Energy Information Administration (EIA)( http://www.eia.doe.gov/emeu/cabs/euro.html#Table2)


13 Ibid.
14 Ibid.
16 “Overall, the EU consumed about 33% of the world’s nuclear power, 28% of renewables other than hydro, 18% of oil, 13% of hydro, 16% of natural gas, and 9% of coal in 2001.” From op. cit. Energy Information Administration (EIA), (http://www.eia.doe.gov/emeu/cabs/euro.html#Table2)
17 The relation between Economic growth and energy demand is one main base for long-term predicts of energy intensity. While such relation varies amongst regions and their economic development process, industrialized countries usually have been enjoying a comparatively feeble linkage with less energy demand and more economic growth.
18 According to the European Commission although almost one-third of EU’s electricity is produced by nuclear plants with none emission problems, EU is seeking a non-nuclear energy future. Storage of nuclear waste and safety of nuclear plant are main concerns but “since there is no easy, affordable and environmentally sound way to replace the atomic plants, nuclear energy seems to remain an inseparable part of the consider on EU security of supply. With renewable sources like wind, water and solar energy limited to a fairly marginal role in most countries for the foreseeable future, the only large-scale alternatives are oil, gas and coal, all of which produce carbon dioxide that contributes to global warming.” From op. cit. EUROPA.. Security of energy supply.
20 Ibid.
23 According to the European Commission, during 80s the EU imports from GCC was around €41 billion and its exports to GCC was about €13 billion, while in 2002 this portion changed to about €18 billion and almost €36 billion


26 Rosemary Hollis, op. cit.

27 French firm Total, the Russian firm Gazprom, and the Malaysian firm Petronas are involved in investment in Iran's South Pars gas field.


32 For some more details see, Geoffrey Kemp and Robert Harkavy, Strategic Geography and the Changing Middle East, (Washington, D. C.: Brookings Institution Press, 1997), p. 120.