

Energy Policy 34 (2006) 3773-3786



# European energy security: Towards the creation of the geo-energy space

Aurèlia Mañé-Estrada

G.A.T.E. - University of Barcelona, Barcelona, Spain

Available online 7 October 2005

#### Abstract

The last changes in the energy scene had culminated in an even-growing capacity of influence of the private energy majors on the political and governmental decisions. However, the European Union has at its disposal the necessary elements—the EU-Russia Energy Dialogue and its relationship with Turkey—that could became a useful regional instrument in order to strengthen the EU's position in the International Energy Scene (IES). That is why the purpose of this paper is to propose the creation of a regional energy block, as a new way of understanding energy policies. We shall define this block as a pan-European *geo-energy* space.

To this end, the present work is divided into three parts. Firstly, we will explain the failure of the policies founded on the Market & Institutions approach. Secondly, and within the actual context of the IES, we seek to point out which elements could support the option of a European regional strategy. Finally, in the third part, we will establish that the existence of the EU-Russia Energy Dialogue and the future incorporation of Turkey are the foundations from which a hypothetical pan-European *geo-energy* space can be built. © 2005 Elsevier Ltd. All rights reserved.

Keywords: European energy security; Russia; Turkey

# 1. Introduction

In a very interesting and thought-provoking paper, regarding matters related to EU energy security, the Clingeandel International Energy Programme (CIEP) annalists diagnosed a "growing exposure to security supply risks for the European Union" (TREN/C1, p. 84) (CIEP, 2004). This growing exposure is explained in the *Green Book*<sup>1</sup> of the EU by the four questions that are pointed out in Table 1: the great weight of hydrocarbons in the consumption of primary energy in the EU; the strong EU dependency of imports of fossil energy; the forecast of a constant growth of both consumption and of dependency from imports; and finally the concentration of the mentioned purchases in a few countries.<sup>2</sup>

From the point of view of this diagnosis, it can be argued that the problem of EU security in energy supply is basically a matter of availability of crude oil and gas. In other words, the cause of the problem of EU energy security is that it consumes—and will continue to do so—a quantity of hydrocarbons far exceeding the production capacity of its member states. For this reason, hydrocarbons have to be imported from third countries, most of which are considered unstable. This is the origin of the energetic instability and, for this reason, the EU must assure, in the future, an increased and constant offer of oil and gas.

Confronted with this situation, there are two frameworks for analysis and their subsequent energy policies: the analysis of *Markets and Institutions* (M&I) and that of *Regions and Empires* (R&E).<sup>3</sup> Both approaches share the idea that the problem has its origin in the fact that the socalled *consumer countries* are dependent on the offer by the *producer countries*. Nonetheless, the two differ in "the extent to which states or markets are seen as the main device for coordinating industrial—and state—behaviour

<sup>&</sup>lt;sup>1</sup>Green Paper. Towards a European Strategy for the Security of Energy Supply.

<sup>&</sup>lt;sup>2</sup>In 2002. the three major crude oil exporters to the EU-15 were the FSU (26.0%), Norway (21.5%) and Saudi Arabia (11.2%); the three major gas exporters are Russia (32.7%), Norway (29.1%) and Algeria (25.2%). *Source*:OECD.

<sup>0301-4215/\$ -</sup> see front matter  $\odot$  2005 Elsevier Ltd. All rights reserved. doi:10.1016/j.enpol.2005.08.025

<sup>&</sup>lt;sup>3</sup>This is the term used in TREN/C1-06-2002.

Table 1
EU-25 primary energy import dependency

Mtoe	1990	1995	2002	2010	2020	2030
Production	877.84	896.80	895.86	859	738.9	660
Solid fuels	40.07%	29.49%	22.39%	17.73%	16.80%	15.39%
Oil	13.71%	18.10%	17.40%	15.31%	13.80%	13.09%
Gas	15.91%	19.42%	21.57%	22.92%	19.98%	17.74%
Nuclear	22.44%	24.01%	27.73%	28.57%	28.92%	28.06%
Renewables	7.69%	8.72%	10.55%	15.47%	20.50%	25.70%
Other	0.19%	0.26%	0.36%			
Net imports	708.96	701.17	826.24	979.8	1215.5	1371.6
Solid fuels	10.61%	10.54%	12.26%	9.29%	10.55%	14.18%
Oil	71.65%	69.99%	63.57%	58.54%	52.00%	48.26%
Gas	17.40%	19.22%	23.89%	31.94%	37.05%	37.38%
Electricity	0.31%	0.20%	0.23%	0.22%	0.15%	0.17%
Renewables	0.02%	0.05%	0.05%	0.01%	0.25%	0.00%
Inland consumption	1553.01	1571.44	1676.89	1788.3	1895	1968.4
Solid fuels	27.79%	21.98%	18.22%	13.61%	13.31%	15.04%
Oil	38.23%	39.52%	38.05%	36.60%	35.76%	34.82%
Gas	16.69%	19.56%	22.95%	28.51%	31.56%	32.00%
Nuclear	12.68%	13.70%	14.81%	13.72%	11.28%	9.41%
Renewables	4.37%	5.00%	5.66%	7.43%	7.99%	8.62%
Other	0.25%	0.24%	0.30%	0.13%	0.09%	0.13%
Import dependency (%)	44.6	43.6	48.0	53.3	62.1	67.5
Energy per capita (Kgoe/cap)	3524	3507	3682	3877	4101	4296

Source: Eurostat (1990-2002); PRIMES&ACE Models (210-2030).

with respect to supply and demand in the oil and gas sector" (TREN/C1, p. 85).

Referring to the European Union, the CIEP report states that "the EU is still firmly embedded in the M&I approach, whereas the US has shifted from a M&I approach to a Regions and Empires approach of the World" (TREN/C1, p. 88). Nevertheless, there are some indications that, at least at the discourse level, Europe is also shifting towards some kind of regional approach.

The publication, in 2000, of the Green Book indicates that the EU countries consider energy matters as something that goes beyond the mere national boundaries. Its publication has already stirred up an academic-technical debate in which the issues of European energy security are analysed from a geopolitical<sup>4</sup> point of view instead of that from supply and demand, which bears an economicist slant. Both aspects -given time and the bias that the word supply implies-are necessary elements for the definition and constitution of a more regional approach towards energy security matters. Its evidence is that, since then, the EU's Directorate General for Energy and Transport clearly speaks about the Regional approach to Energy Supply<sup>5</sup> and in the framework of the European Neigbourhood Policy (NEP), there has been a proposal of creating an *energy ring*. Both initiatives are also in accordance with the 2003 communiqué

of the Commission named On the Development of Energy Policy for the Enlarged European Union, its Neighbours and Partner Countries. Furthermore, this document reinforces the regional aspect of the European energy security, in so far as its aim is to promote "the development of a real energy community in the wider European area. Such a development will promote shared prosperity, stability and sustainable development" (COM, 2003, p. 32). Because, together with the neighbouring countries and our partners, the European Union can face the challenges of growing external energy dependence, the need to address infrastructure issues on a regional level" (COM 2003, p. 4)

In our opinion the EU should make this shift towards energy policies founded on some kind of regionalized approach, because this could be a good opportunity for both increasing the regional energy security and to strengthen its position in the International Energy Scene (IES). From this point of view, the main aim of this paper is to point out what elements could support the option of a European regional strategy and to propose a certain reinterpretation of the R&E approach, the creation of a pan-European *geo-energy* space, that might improve the situation of the whole area within the IES.

This proposal is motivated by three factors. First, the failure—in terms of energy security—of the policies inspired by the M&I approach; secondly the changes that have taken place in recent years in the worldwide energy scene that would make it advisable to adopt a more regional approach towards energy issues; and finally, since

<sup>&</sup>lt;sup>4</sup>See IEES (2003) and (TREN C1/06 2002).

<sup>&</sup>lt;sup>5</sup>European Commission, DG for Energy and Transport, *Memo on Energy Policy in South-East Europe.* 

2004—but above all the one that will arise in 2007—the "new" EU's neighbourhood.

## 2. The failure of the markets and institutions approach

The M&I approach analyses the evolution and perspectives of a Worldwide Energy Market (WEM) deriving from the hypothesis that this WEM is just another aspect of the "continuation and intensification of internationalisation of markets—globalisation- and the continued co-operation in the international political and economic institutions within a context in which the evolution of the multilateral system will continue to govern international relations, although it is possible that a state is dominant" (TREN/C1, p. 84).

This is an economicist approach, inspired by a neoliberal school of thought, seeking the creation of an energy market as a self-regulating mechanism of energy security. Furthermore, this approach takes for granted—a very relevant point when talking about security of energy supply—that the objectives of the private energy companies do satisfy the needs of the consumers of energy goods.

Faced with these hypotheses, the main goal of energy policy is, first, to create the energy market and then, to keep it protected from the-always-arbitrary action of the producer States and from the Governments of the consumer countries, so that private energy companies are not subject to any uncertainties. Thus, a good instance of the application of the M&I approach appears to be the Energy Charter<sup>6</sup> where we can read, in the explanation of objectives, that "The Energy Charter Treaty provides the broadest multilateral framework of rules in existence under international law governing energy cooperation. As the trend towards globalization continues, it is likely that the strategic value of these rules will increasingly be appreciated by governments, in the context of their efforts to build a legal foundation for global energy security, based on the principles of open, competitive markets and sustainable development. The fundamental aim of the Energy Charter Treaty is to (...) minimizing the risks associated with energy-related investments and trade". With this, the Energy Charter sees itself as a constitution or a multilateral framework agreement—an institution- whose objective is to obtain the optimal WEM-a market- and not a selection of the best energy policies.

This method of addressing energy policy is not exclusive to Europe and in the last decades, it has been predominant in most of countries across the world. During the 1980's and 1990s, the implementation of policies based on such an approach has been partially successful in as much as they have attained part of their acknowledged objectives: to increase and diversify the crude offer as the foundation of energy supply security.

From the production point of view, the most relevant change is that there are a greater number of producer countries and, therefore, a larger volume and the diversification<sup>7</sup> of the offer of crude oil, which should imply greater security in the supply of energy. Nonetheless, as it has been explained elsewhere<sup>8</sup> other data indicate that this geographical expansion<sup>9</sup> has run parallel to a process of transnationalization and ownership concentration<sup>10</sup> that brings us to the greatest rearrangement of the energy sector in the last 30 or 40 years. These changes result in a concentration within the *downstream*, together with the elimination of entry barriers formerly established by the so-called *producer country* that had limited the activities of private foreign companies.<sup>11</sup>

For this reason, the implementation of policies based on the M&I approach has produced a dramatic change: now we find a scenario with few private companies, totally integrated.<sup>12</sup> In other words, a lesser number of companies

<sup>8</sup>A wider and more empirical explanation can be found in a previous version of this paper presented at the Sixth Mediterranean Social and Political Research Meeting of the Mediterranean Programme of the Robert Schuman Centre for Advanced Studies at the European University Institute, Montecatini Terme, March 2005 (Mañé, 2005a).

<sup>9</sup>That greater or lesser dispersion can be analysed with the Herfindal coefficient. This is a coefficient with values comprised between 1 and 0, the first value being the one indicating a greater concentration and the second a greater dispersion. The use of this indicator to analyse the evolution of the acquisition costs of the Great Energy Producers of the United States shows that on the beginning of the 1980s, the coefficient's value was close to 0.9 and, in 2001 the same figure was close to 0.3. Source: DOE/EIA, FRS Database, Consolidated Company Operations and own elaboration

<sup>10</sup>This concentration of ownership reflects itself in the fact that, in the USA alone, half of the 20 largest companies producing oil and gas in existence by 1992 have merged or have been acquired in 2001. Source: EIA, Performance Profiles of Major Energy Producers, 2001

<sup>11</sup>According to EIA data, the percentage of oil production of private energy companies (ExxonMobil, RoyalDutch/Shell, ChevronTexaco, BPAmocoArco, TotalFinaElf and the Russian Lukoil and Yukos) went from being 11% of the total world production in 1992, to 21% in 2001. This figure might be greater since all these companies have subscribed Shared Production Agreements with almost all the public companies that appear, like them, in the list of the top 20 oil producers in the world. On the other hand, if we add the world gas production to this list, the percentage of primary energy produced by these same companies increases dramatically. Finally, we should not forget that the recent invasion of Iraq could cause these companies to control a great part of the 10% of the world's oil-proved reserves.

<sup>12</sup>An example of this assertion lies the fact that in the year 2002, 12 companies vertically integrated represent 60.7% of the United States' total refining capacity, while in 1982, the percentage, for these same companies, was only 39,1%. Most of these 12 companies have created join ventures with others like Petróleos de Venezuela, ARAMCO or PEMEX, to create oil-processing plants in the United States, which adds a further 16% to the refining capacity partially controlled by them. Furthermore, 7 of these 12 companies are on the list of the largest crude oil producers in the world,

<sup>&</sup>lt;sup>6</sup>The term "Energy Charter process" is used below to cover all obligations contained in, and activities relating to, the 1991 European Energy Charter; the 1994 Energy Charter Treaty (as amended by the 1998 Trade Amendment); and the 1994 Energy Charter Protocol on Energy Efficiency and Related Environmental Aspects.

<sup>&</sup>lt;sup>7</sup>A simple analysis of the territories producing crude oil indicates that, geographically, there is a lesser concentration of production. By applying an index like the Herfindal-Hirschman (HHI), we obtain that the degree of concentration of the five topmost producers and that of the first 20 ones has decreased to 386.56 and 526.44, respectively, which means a descent in the degree of concentration of 136.86% and 91.31%. *Source:* EIA, AER, Database and own elaboration.

tend to control vertically—all the phases of the oil industry—and horizontally—throughout the entire world—the world's production of energy. This also means that, apart from propitiating a greater degree of monopoly, the situation can result in the actual disappearance of the hydrocarbons market—as imperfect as it is—since the same companies controlling the oil wells are the ones that consume their own product.

This situation has its translation on the proliferation of PSAs.<sup>13</sup> This implies "that national oil companies were no longer (...) mere rent-collecting agents of landord states. Their role became one of protecting the profits of private investors, and transforming the landord states into simple shareholders" (Mommer, 2000, p. 23). In other words, it means opening the doors to a transfer of the surplus from the "Producer States" to the private companies of the sector<sup>14</sup> because, as stated by Nitzan and Bichler (2003), "Oil companies aren't interessed in drilling concessions, they are interested in profit". This new situation would mean an intensification of the "struggle" for the control of these sources of surplus, that will bring about not only an increased instability in the producer territories but also higher prices.<sup>15</sup> As a matter of fact, the same quoted authors, in a different publication (Nitzan and Bichler, 2002, p. 227) explain what this "struggle" would stand for: the perfect correlation among the higher prices, the higher benefits of the "petro-core"<sup>16</sup> and the increment of income by exports (increasingly less national) of the OPEC countries

<sup>13</sup>These kinds of agreements are usually signed by several foreign and national companies the first being those who take care of all prospecting and exploration costs until the beginning of the activity. From then on, these companies receive, as compensation, payment of the so-called oil costs, whose value must cover the initial investment. Afterwards, the oil benefits are shared by foreign and national companies according to the percentage of their participation in the venture. These agreements are, in fact, very similar to the old concessions, with the legal difference that the states of the oil-rich territories do not "cede" territory but the product it gives. For a legal explanation of this type of agreements, see Paliashvili (1998). For an economic analysis of the same, see Bindemann (1999).

<sup>14</sup>A vast amount of data bear witness to this reality. For instance, in the last few years, whereas in Nigeria and Algeria, the National Rent tends to be less than the GDP, 95% approximately, in Kuwait, where access of FDI to the oil fields remains limited, this same figure is almost 120%. On the other hand, the IMF itself (Country Report 03/60) calculates that due to the existing agreements, in Nigeria the oil-related public revenue will fall by 21% in 2007. In Algeria, since 1994, the public income derived from oil has dropped by 36% and the percentage of the oil and gas exports that pay for the PSA has already reached 20%. Source: own elaboration, based upon the FMI Algeria Statistical Appendix, several years.

<sup>15</sup>From our point of view, the idea of price increase as a result of a "struggle" for the appropriation of a greater percentage of the oil surplus is also reflected by statements like this one: "The competition therefore also signifies a clash between models of market organization in which economic rents are distributed over companies and governments of producer and consumer countries' (TREN/C1, p. 253).

<sup>16</sup>British Petroleum, Chevron-Texaco, Exxon, Mobil, Royal Dutch Shell.

Therefore, we can conclude by asserting that policies based on the M&I approach do not seem to lead to a safer energy scenario, but they do result in a greater power for private companies of the sector and in a dispute over the greatest participation in the energy surplus which, for the moment, coincides with the strong increase in the oil prices we have been experiencing in the last few years.

However, it would be unfair to deny, as explained by Martin-Amoroux (2003), that in the last decades of the 20th Century, a "technological revolution" took place that caused a greater internationalization of the sector, together with the opportunity to create a crude oil market technically unified—usually known as *the great pool*— (Noël, 2003). This is due to the fact that different kinds of crude oil could be processed either in America, Europe or Asia; both because the technology exists to do so, and because the differences between the costs of transporting oil from one place to another are steadily decreasing.

In terms of security, this is relevant because it implies the disappearance of regional oil markets. This means that the consumer countries can reduce their dependency from a particular supplier and benefit from a geographically diversified energy offer. However, in the present context, where the ownership of the energy industry is increasingly more concentrated and trans-nationalized, the situation would probably be just the opposite, since in the end, the degree of dependency (thus, of vulnerability) of consumers will depend on the strategies and alliances of the oil sector companies. This assertion would be corroborated by the fact that crude oil is not commercialized by States or by national economies but by companies commercializing or refining oil, whose nationality and interests may or may not be the same as those of the national States where they are located.

Therefore, once we have seen the political results of the M&I-based policies, we can say that the fate of the energy security in Europe will be strongly dependent on the alliances and power relationships established between the great "European trans-nationals" of the sector (TotalFinaElf, BPAmocoARCO, Royal Dutch/Shell and, to a lesser degree, others like RepsolYPF) and their counterparts in other parts of the world (North-American and Russian); energy security in Europe will also be dependent on the relationship of both groups of companies with the present hegemonic energy agent: the USA. Nonetheless, this diagnosis on Europe's energy future does not consider certain changes that have taken place in recent years in the worldwide energy scenario. Changes, on the other hand, could make it advisable to adopt a more regional approach in energy issues.

#### 3. Elements for the creation of a regional strategy

In the first place, the growing weight of gas consumption<sup>17</sup> as the primary energy makes it unavoidable for

<sup>(</sup>footnote continued)

for the year 2000 and 8 of them are on the equivalent list of gas producers. Source: EIA; U.S. Refining Capacity, 1982 and 2002; Worldwide Production of Oil and Natural Gas by 35 Largest Producers, 2000.

<sup>&</sup>lt;sup>17</sup>The EIO2004 projections are that, in 2025, the worldwide share of Natural Gas consumption will be about 25.26%; however, the projections of the PRIMES/ACE sources for the future European demand of natural

analysts to reconsider the creation-and therefore the regulation—of regional markets of primary energy. An energy model based on gas presents many common traits with the oil one, but with two significant differences: (a) the predominance of gas can mean a change in the relevant agents of the IES, particularly regarding those in the producer territories<sup>18</sup> and (b) that—to state it in the same terms used before-the gas market is not technically unified. In the case of gas, geographical proximity does matter<sup>19</sup> and because of this, the possibility of creating "regional markets" "controlled" by regional agents is a very real one. As a matter of fact, the same European Union establishes, in the technical report for the elaboration of the Green Book, that a world market for natural gas does not exist: gas is sold in three markets of three separate consumers: the United States, the European Union and Asia. From this we can deduce that, while in the case of oil an M&I approach might continue to be of use, when referring to gas, things do change. In other words, the full potential of regional alliances as instruments of energy policy should be carefully considered since gas intrinsically "imposes" regional buying and selling policies.

In the second place, the appearance and subsequent consolidation of a new reference currency—the Euro issued by the second biggest consumer and first importer of hydrocarbons in the world—Europe—allows us to think that in the near future, some supply contracts can be made in a currency other than the US Dollar.<sup>20</sup> This second aspect allows us to foresee a future energy market that will be, currency wise, bipolar, with a zone closing its contracts in US dollars and another one dealing in Euros. Such an evolution would propitiate the regionalization we have been contemplating, particularly if we consider the increased importance of the financial aspects of hydrocarbons when compared to their mere role as energy goods.

Whereas during the *Seven Sisters* period, the fundamental thing in terms of oil is that it allowed a fordist industrialization process to keep going on, in the present phase of capitalism we can observe that the financial side of oil certainly plays an important role. It is true that a regular supply of energy is "convenient" but it is also true that the generation of *petrodollars* is also necessary for the financial capital to go on expanding itself and to keep financing economies with structural deficits. A good example of this assertion is the United States, and its strong dependence an this kind of financing, taking into account that oil income makes "the country's massive trade deficit tolerable and its foreign military operations financially bearable (...), because (...) foreign dollars are used to purchase US government debt (...) and they (...) allow strong levels of consumption and investment despite extraordinary low rates of saving" (Looney, 2004, p. 27).

This financial side of the oil business can be reinforced by policies proposed by international economic organisations in order to avoid the resource course.<sup>21</sup> They advise the creation of stabilization and saving funds, whose main purpose is to turn oil assets into financial assets,<sup>22</sup> so that the exporting countries can invest them in the international capital markets. This could cause, as it actually did during Iraq's invasion of Kuwait, States of the producer countries to see their funds-rather than the physical oil-as the new instrument of international politics. Furthermore, the other side of the coin is the fact that these funds are seen as a source of finance by the great "consumer" economies: the necessary instrument to finance the growing structural imbalance of the balance of trade. For this reason, both factors indicate that the creation of these funds can be relevant to the establishment of regional "financial" alliances capable of influencing the IES. Thus, if we take into consideration the Euro factor and the financial side of hydrocarbons, it is easier to conceive alliances between producers and consumers within the same currency territory. These alliances may not be directly determined by energy security, but in a context of "two reference currencies" can result in a regional and monetary segmentation of the IES.<sup>23</sup>

<sup>(</sup>footnote continued)

gas are higher: about 32%. Source: EU-25 Energy and Transport outlook to 2030. Part IV.

<sup>&</sup>lt;sup>18</sup>At the end of 2002, Saudi Arabia (25%), Iraq (10.7%) and the UAE (9.3%) were the first three countries in oil-proved reserves; however, when we talk of natural gas, the first three are: the Russian Federation (30.5%), Iran (14.9%) and Qatar (9.20%). *Source: BP Statistical Review of World Energy, June 2003.* 

<sup>&</sup>lt;sup>19</sup>Apparently, however, in the case of the LNG the situation of the regionalized "markets" is increasingly more complex. See Cayrade, (2004). On the other hand, other authors categorically state that the LNG market is not—nor will ever be—a world oil market (Jensen, 2004).

 $<sup>^{20}</sup>$ Since the United States' invasion of the literature specializing in energy security has given greater relevance to this issue. See Looney (2004) and (TREN C1, pp. 231–236)

<sup>&</sup>lt;sup>21</sup>This definition has been coined by Auty (1993) to define the tendency which many natural resource-rich countries empirically show. The curse consists in the fact that countries supposedly wealthier than others show worse results, in terms of economic advances and poverty reduction, than other countries which did not enjoy this apparent advantage. For an excellent review of several case studies and theoretical interpretations of this curse, see Stevens (2003).

<sup>&</sup>lt;sup>22</sup>For a detailed explanation on the operational aspects of fiscal policy in oil-producing countries, see Barnett and Ossowski, 2003.

<sup>&</sup>lt;sup>23</sup>What has been said in this paragraph brings us to some questions of method or related to the analysis of the IES. If we consider the financial aspects, the interests of producers and consumers theoretically converge, since both are concerned with the creation and growth of investment funds fed on oil income. For this reason, the ideas we have just explained would allow us to formulate a behaviour hypothesis for the producer states and the consumer governments different from those to be found in a scenario where hydrocarbons were understood only as energy "assets". From this point of view, in future analysis of the IES, it will be necessary to include agents-like banks and financial bodies-whose assigned role in the IES evolution has been traditionally a lesser one. Another issue supporting this idea, although secondary within our line of argument, is the fact that thanks to the existence of future markets and oil products markets, since the 1980s of the 20th Century a "financial market" for hydrocarbons has appeared, together with a "physical" one. For this reason, in the last year, the financial activity has multiplied its operations of unrefined oil buying and selling by seven. An estimated 2 to 3 dollars out of the total increase in the prices of unrefined oil in the summer of 2004 are thought to be a result

Table 2	
Russian Federation and USA Energy Sect	ors

Oil pro		Gas pr reserve		Oil pro	oduction	Gas pr	oduction	Crude	exports	Gas exp	ports	Refini capaci	e	Top 2	0 GPE <sup>a</sup>
Russian Federation															
%	n 1/4	%	n 1/4	%	n  1/4	%	n 1/4	%	n 1/4	%	n 1/4	%	n  1/4	Oil	Gas
5.7	7	30.5	1	10.7	2	23.41	1	12.28	2	29.73	1	6.6	3	2	?
USA															
2.9	8	3.3	6	9.9	3	21.55	2	26.06	1	25.05	1	20	1	3	5

Source: EIA, Major Energy producers 2001, EIA (2004) Country Profiles USA and BP Statistical Review of World Energy, June 2003.

<sup>a</sup>The ranking is only for crude and natural gas production. The three oil USA producers are ExxonMobil, ChevronTexaco and BPAmocoArco gas USA producers are ExxonMobil, ChevronTexaco and BPAmocoArco, Unlocal and Burlington Resources. The two oil FR producers are Lukoil and yukos. Gazproducer

In the third place, the existence of a "non-aligned" energy agent is an opportunity to set up a bipolar energy order characterized by the relationships that both producers and consumers establish with the two great agents of energy policy: Russia and the USA. This idea is reinforced by the importance and emergence of the Russian Federation as a worldwide energy agent and by what appears to be a commitment to the "russification" of its energy sector, particularly after Putin's intervention of the oil company Yukos.

As can be seen in Table 2, it cannot be denied that the Russian Federation possesses within its territory a wealth of hydrocarbons (oil and gas) that places it as a first-rate agent in the international energy scene. It has the largest reserves and is the world's first producer and exporter of gas; it is the second largest producer of crude in the world after Saudi Arabia (seventh in volume of reserves) and its exports constitute 12.20% of the whole.<sup>24</sup>

These figures have made the IEA (2002) consider that the Russian Federation—and the Caspian territories—can be an alternative to the world dependence on OPEC's exports of crude oil, provided that they make certain reforms in the hydrocarbons sector. But the role that Russia appears to be destined to play in the IES is very different from those of other countries. This is due to a number of different factors.

First, what could be defined as its energy potential, since Russia, has been a territory rich in hydrocarbons, is not only an extractor—exporter country. As can also be seen from the table, it is the third country in the world vis-à-vis refining capacity; furthermore, the public company Transneft controls the entire network of gas and oil pipelines that go in or out of its territory. What is more, Transneft does have control capacity over the transit of hydrocarbons from the Mediterranean to the Pacific and from the Indic to the Bering Sea. These facts, together with the reserves and production, indicate that Russia is one of the few countries in the world that possesses an integrated energy sector, which makes the country independent of foreign agents with respect to the refinement and transportation of its hydrocarbons. Moreover, regarding magnitude, it is one of the few countries capable of influencing both the world's *upstream* and *downstream*.

To stress this point, it should be taken into account that some of the vertically integrated Russian oil companies are listed amongst the first in the world, both in terms of market value and in terms of production.<sup>25</sup> Not to mention that Gazprom, the state gas company, appears as first in the world in almost every classification. These companies are great exporters of hydrocarbons, but they are also the only ones supplying energy products to an internal market-plus that of the CIS countries-with millions of consumers. Additionally, and this is not a trivial matter, these companies are mainly Russian owned, because even though they have experienced a concentration and internationalization<sup>26</sup> process, the mentioned process, unlike those experienced by companies from other hydrocarbonexporting territories, has respected the Russian identity of the companies and given preference to direct investment abroad<sup>27</sup> instead of becoming a recipient of the FDI themselves. In fact, it is the only territory in the world where foreign investment and shared production

<sup>(</sup>footnote continued)

of acquisitions in the oil "financial" markets. In fact, as suggested in an article published in EL PAIS on 13th. June 2004, this kind of assets has granted profits unparalleled by any other stock exchange or bonds market.

<sup>&</sup>lt;sup>24</sup>Source: BP Statistical Review of World Energy, June 2003.

<sup>&</sup>lt;sup>25</sup>Lukoil and Yukos (before the intervention) were, respectively, the 13th and 18th oil producers in the world, with percentages of 2.1% and 1.3% of the total production (Performance profiles of Major Energy Producers 2001, Table 10, EIA).

<sup>&</sup>lt;sup>26</sup>As described by Locatelli (2004, p. 2) "Today, the Russian oil industry is an oligopolistic industry structured around great industrial-financial groups. Four great private oil companies, Lukoil, Yukos, TNK-BP and Surgutnefyegaz, secure 66% of the production and 57% of the exports (...) The concentration of the oil industry has been reinforced, all along the nineties, through great mergers. These have consisted of Lukoil's taking over 100% of KoniTek, Yukos' control of 45% of VNK, and Sibneft and TNK taking over, respectively Slavneft and Sidanki".

<sup>&</sup>lt;sup>27</sup>The only exception to this is the Joint Venture TNK-BP, but as proven by Andreff (2003) the IDE stock going out of Russia has gone from 384 million dollars in 1994 to 14.414 million in 2002 and the six topmost investors come from the energy sector (Gazprom in 32 countries, RAO UES in 10, Lukoil in 25, Yukos in 10, Surgutneftgaz in 40 countries and TNK in Ukraine).

agreements between companies are virtually non-existent or are not operative.<sup>28</sup>

In short, Russia has the potential to become the first energy agent of the future, effectively challenging the USA's leadership<sup>29</sup>—see Table 2—. This will be possible because Russia has a national integrated energy sector and can be independent of alien energy agents. Also, because the companies of that sector hold a "captive" market-due to the existing network of oil and gas pipelines-from Europe to the Pacific so that, in case of an eventual increase in effective demand, they have an ample safety margin to survive without the exports, and finally, because Russia has vertically integrated companies, capable of reaching agreements and alliances and of competing with the great transnational energy companies. Furthermore, whereas Russia is self-sufficient, in the USA the proportion of imported oil vis-à-vis the total consumption has never ceased to increase.30

Consequently, the Russian energy sector presents similarities to that of the USA, which is the major nonbusiness agent today, with the greatest influence on the IES. But Russia has advantages vis-à-vis the US: its nondependence on imports and its geographic situation. This leads us to consider that Russia has every possibility of establishing "energy areas" of regional influence together with other producers (the Caspian countries) and, above all, with other consumers (the CEI countries, Asia and Europe). This is why we foresee the very real prospect of a new, bipolar, energy order with regions that are, energy wise, subordinated to the interests of the USA and of Russia.

The alleged "national sentiment" of the Russian energy agents would reinforce that idea, since it can actually invalidate something that many analysts absolutely rely on: that private companies of the sector and the great private trans-national companies from the rest of the world ally in order to "favour" western consumers.

As explained by Locatelli (2004b, p. 1) "the reforms (...) allowed the appearance of new agents, very independent of the State and its interests. The [Russian oil] industry articulates itself around three kinds of agents: the State, the regions and the private companies. These groups are, by no means, homogeneous. Even within the Government there is no unanimity as to which reforms have to be implemented (...) Therefore (...) the decision making process is the

result of a complex power balance, brought about by the multilateralism of the negotiations (...)". Among the above-mentioned three agents there is a discrepancy of interests that, read internally, results in a "struggle" for the rent from hydrocarbons.<sup>31</sup> But a convergence of interests is also possible: their position concerning the penetration of foreign capital. The three agents-companies, regions and State—appear to consider that the introduction of a fourth agent-the trans-national energy companies-into their activities or territories and in the struggle for the sharing out of the rent would lead to the end of the present way of managing the oil's industry, benefits and rent. This is why, unless one of the three Russian agents considers that an alliance with foreign capital can improve its chances in the dispute for this distribution—as might have been the case with Yukos-, the position against foreign capital can be the point of agreement of the oil sector's agents—as proven by their common position after the intervention on that company.<sup>32</sup>

We can therefore assume that the Russian oil game is a struggle that fluctuates from an extremity of disagreement among the different Russian agents—the internal sharing out of the rent into profits for the companies or their owners, social rent and payment in kind for the regions and taxes for the State—and broad agreement over the non interference of foreign capital in their practices—not at all in compliance with the capitalist market's rules—aiming at the appropriation of the oil's rent. If that were so, the bipolarization appears inevitable, together with a certain degree of regionalism—as opposed to or as a part of the globalization—in international energy relationships, as well.

Finally, the fourth element pointing to a regionalized IES is the growing demand for hydrocarbons, in the face of a temporarily uncertain supply. This has driven certain countries, particularly the USA, to take positions—predictably exclusive ones- to assure future supply.

 $<sup>^{28}</sup>$ In August 1998, after years of blockage by the Duma, a law was passed for the regulation of Production Sharing Agreements, but, as can be seen in the report on the energy sector by the IEA (2002, p. 32), the law was approved in 1999, but regulations necessary to apply it did not exist three years later. Due to this, the few PSA that had been signed have never come into force.

<sup>&</sup>lt;sup>29</sup>As stated by the EIA (2004, p. 1) "The United States of America are the world's bigger producer of energy, the greatest consumer and the greatest importer".

<sup>&</sup>lt;sup>30</sup>When reading the projections and forecasts it is easily assumed that the increasing dependence of the USA on foreign sources of energy will continue to grow in future years. See Annual Energy Outlook 2004 with projections to 2025 y Energy Challenges facing the United States.

<sup>&</sup>lt;sup>31</sup>The paramount objective of the companies is to maximize benefits in the Russian context, which, today, means minimizing the costs by exploiting to the full the infrastructures inherited from the soviet era or avoiding the payment of taxes with strategies like price transferring. The regions that—due to the dubious constitutionality of the measure—appear to have the authority to give exploitation "concessions", or to establish specific tax systems for the oil companies resident in their territories, intend to maximize the social rent these companies can provide. As a result, in exchange for concessions and tax benefits, the regions try to make sure that the energy companies give employment and social commodities to the workers, that they supply central heating to the homes and energy to other productive activities. Finally, the State might back one of the aforementioned agents or else it could state that the rent from hydrocarbons is national and meant to be the pillar of its economic and foreign policy. Locatelli (2004a and b)

<sup>&</sup>lt;sup>32</sup>This seems to be the idea that can be inferred from reading Locatelli's articles, but other facts exist that corroborate this hypothesis: the approval in 2003, apparently without dispute, of a modification of the PSA law, that practically invalidated the very possibility of their existence, and Putin's intervention on Yukos after Joodorkovski's attempt of dealing with Exxon, a move that was apparently welcome and even supported by other Russian oil magnates.

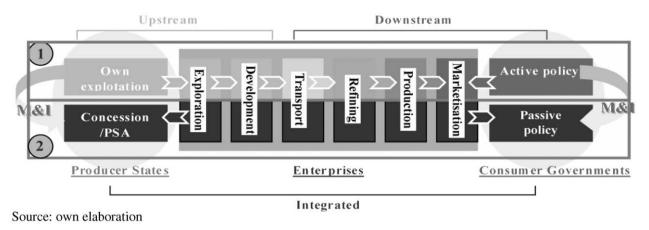


Fig. 1. Source: own elaboration.

As proven by Marzo (2004), several analysts point out that between 2006 and 2007 the oil production will reach its peak. This would foretell the end of oil production by the 22nd Century. It is true, however, that other analysts affirm that nobody can vouch for the consistency of these figures, both because of the political and economic interests implied in that statement,<sup>33</sup> and because of the technical factors involved in the exploration and recuperation capacity of the existing oilfields.

Whatever the data, the fact is that the notion of the "end of the oil model" is beginning to carry some weight in the expectations of the agents intervening in the IES. And the prospect gets bleak because together with the hypothetical end of a model, there has been a great increase in the number of countries which may become great purchasers of hydrocarbons, particularly in Asia, with China in the lead. Today, any analysis will reflect this situation, and for that reason we consider that no additional information needs to be provided, although it is relevant to our purpose to point out that the "catastrophist" hypothesis and the emergence of a new, solvent, energy demand has generated a strong competition for the control of the future energy resources in which some countries, like the USA and China, appear to be more active than others, namely, the European Union. A case in point, as Guez (2003) and Noël (2003) explain, is that one of the three pillars of the present energy policy of the United States consists of securing its "energy offer"-present and future- through the creation of Rapid Deployment Forces (RDF), not only in the Gulf area but also-since the intervention in Afghanistan-in Central Asia. In view of this, it seems reasonable to think that, in the future, there will be a greater competition among the three great "regional" blocks (America, Asia and Europe) in order to gain access to the territories rich in hydrocarbons.

Consequently, the four aspects we have just pointed out—possibility of a regional gas market, agreements between financial areas, a bipolar scenario, and greater interest in securing the supply-can lead us to the hypothesis that, in the future, the IES evolution will be shaped by "the break-up of the world in integrated political and economic blocks with satellite regions that compete for markets and resources with other blocks" (TREN/C1, p. 84). This coincides with some of the ideas of the second method of the theoretical analysis that was mentioned at the beginning of this paper-the Regions and Empires approach because it stresses that the valid premise for the analysis of the "International Energy Scene" is the one stating that the multilateral system will become trivial compared to the inter-block interests. However, we do not share its more extreme vision of the R&E approach, which, building on the idea that hydrocarbons are the energy foundation of the system—as well as a limited and not unlocatable resource—goes on to propose energy policies whose main objective is the control and "capture" -be it peaceable or not-of the greater possible number of "oilfields".

This leads us to the question of how we can create a regional energy policy that is neither unilateral nor exclusive. The Commission, in the aforementined communiqué gives us a clue about it when it states that "the European Union can face the challenges of growing external energy dependence developing a real energy community in the wider European area, for promoting shared together with the neighbouring countries and our partners". From our point of view, this plan should be developed in a theoretical framework that surpasses the bias of both: the M&I and the R&E approaches, Fig. 1, helps us to find out how.

First, this figure reminds us that in IES there dominant agents are always present. In the central part of the figure—*enterprises*—we can see that hydrocarbons generate an energy industry which is, vertically, very integrated, and presents, roughly, two phases. one grouping all the socalled *upstream activities*—those related to hydrocarbons extraction- and the other gathering the *downstream activities*—refining, transportation and production and distribution of the resulting goods, be those energy related

<sup>&</sup>lt;sup>33</sup>See Mitchell (2004).

or not. Both kinds of activities are interconnected, which is why, in the oil market there will always exist agents with a greater (case 2) or lesser (case 1) power.

The next point we can point out from the figure is that in the IES there is always the intervention of different types of agents: enterprises—at the centre—and the *Producer States* and the *Consumer Governments* (parts left and right of the figure, respectively).

What the left part of the figure infers is that hydrocarbons are a specific resource, which is found in the subsoil of certain countries and therefore is not apt for reallocation. For this reason, its exploitation is always subject to certain authorizations. This characteristic implies that the States of hydrocarbon rich territories can intervene in the IES in their capacity as owners of the *upstream* companies—the so-called National Companies— (case 1) or as agents granting concessions of legislating over Production Sharing Agreements (PSA) (case 2). For this reason, the policies of the *Producer States* will always influence the evolution of the IES. This will be the case even if this action consists of opening the oilfields to foreign private investors.

In the case of the *Consumer Governments*, the intervention of Governments is due to the fact that the consumers of energy goods—private citizens and companies not belonging to the energy market—are different from the buyers of oil and gas—the *downstream* companies. Therefore, to satisfy the citizen's need for a reliable supply of energy, those who have it in their power can actively assure this supply (arrow pointing to the left) by creating a public energy sector (case 1) or by means of other regulatory measures (case 2) in which public action is an answer to the actions of the companies (arrow pointing upwards).

Therefore, this second characteristic indicates that in the "petroleum game" play, at least, but always, three types of agents. Depending on the cases, these can have complementary or conflicting interests. In this sense, policies founded in the M&I approach favour the performance of the *enterprises*, but those founded in the R&E one favour the willpower of the political agents. This is why it seems more appropriate to understand the IES as a governance structure: *a set of political and legal rules based on power* relations (Mommer, 2000, p. 2).<sup>34</sup>

Therefore, Fig. 1 helps us to understand why the R&E approach is opposed to the M&I one: in the R&E approach the main agents of the IES are the "politicians" —the extremes in Fig. 1—, while for the M&I one, the main agents are the *enterprises*—at the centre. For this reason, the proposed energy policies are different. Also, for the same reason, we argue that both approaches are one-sided.

Therefore, we claim that the new European regional approach to the energy policy must be more comprehensive than the current M&I and R&E and must not ignore that the IES is a *governance structure*. Furthermore, this approach should study, indeed, how the creation of energy regions or blocks can promote some kind of multilateralism, because the opposite case—the unilateralism or exclusion of other regions—can only lead to a clash.

According to this brief note on methodology, we shall build on the need for the European Union to encourage the creation of an *energy community in the wider European area*, as a new way of understanding energy policies. We shall define this block, by way of analogy with the classical vision of geo-politics, as a pan-European *geo-energy* space: a geographical area with a *governance structure*. To be precise, a geographical space where a precise set of energy relationships take place, among different agents—*producer states, enterprises* and *consumer governments*—who are active within it, and whose borders are wider than those of the present-day European Union—the current EuroMediterranean and the eastern EuroAsian territories.

Furthermore, within this space the exchange of energy goods is the foundation for a *security community* to be built, starting from the voluntary integration of its members,<sup>35</sup> and not excluding relationships with other spaces. In fact, we can transfer to the energy context the views of Erzan (1999) and Pertres (2004), and go on to claim that the creation of the said *geo-energy* space will give Europe an instrument to establish better relationships and to better integrate itself in the new international energy scene. It will also allow Europe to *play a prominent role in shaping the debate, instead of merely tagging along with (or rejecting) US initiatives.* 

# 4. Elements for the creation of a pan-european *geo-energy* space

Are there elements favourable to the creation of a pan-European *geo-energy* space? The circumstances defining the tendency during the latest years are not encouraging, but now, the elaboration of the Green Book, which gave a strong impetus to the energy debate, and the NEP that arose from the *enlargement*, provide us with certain signs

<sup>&</sup>lt;sup>34</sup>Finally, we shall mention, even if is not strictly the matter of this paper, that the objective of the said agents (*Producer States, Consumer Governments* and *enterprises*) is to "capture" the largest percentage possible of oil surplus Chevalier (1974) and Mommer (2000, 2002), understanding, as Mommer does, that it is the governance structure that delivers an economic variable. In other words, this idea means that prices of the energy goods are a result—and the visible part—of a set of power relationships (either cooperative or conflictual) among different agents who compet for the rent (the countries) and the benefit (the companies) of the resources extracted from the subsoil. Thus we can understand transition from situation 1—in the figure—to situation 2 as a result of the growing power of the private sector within the energy scene (represented, in the figure, by the different orientation of the arrows) since these policies imply an increase in the percentage of company benefits in the oil surplus, to the detriment of the rent of the producer

<sup>(</sup>footnote continued)

countries (national income derived from exports) and that of the consumers (low energy costs).

<sup>&</sup>lt;sup>35</sup>According to Lorca's definition (Lorca, 2004) we could talk of an energy Trion: a geospace, formed by voluntarily integrated states, who relate to one another through mutual exchange.

that the European policies might be capable of reversing that tendency. We shall look at these circumstances and go into the detail of these signs.

The first circumstance is that the continued implementation of the M&I approach within the historical *geo-energy* space of the European Union—the Euromediterranean area—has resulted in a drop, if not of the mutual exchanges, them certainly of the relative weight of the regional agents and their interaction; nonetheless, the importance of foreign, private agents<sup>36</sup> has not ceased to grow. This hinders the creation of a *pan-European geo-energy* space because it would imply that within this geographic area, energy relationships exist among nonregional<sup>37</sup> agents. Moreover, we must assume that this situation can become worse if anything similar to the current Great Middle East Initiative (GMEI) ever comes into effect.

To compensate for these elements, detrimental to the creation of its own *geo-energy* space, the European Union has launched, from the year 2000, two initiatives that might counteract the above-mentioned two negatives ones, and have become the pillars upon which a hypothetical pan-European *geo-energy* space could be built. These initiatives are: (a) the EU–Russia Energy Dialogue, which can bring about the elements for the pan-European *geo-energy* space to have its own place, complementary to but independent of the United States and (b) the endorsement, by the European Parliament, of Europe's enlargement towards Turkey, which constitutes the integration of a new type of energy agent—a key one, and of the first importance—in our hypothetical *geo-energy* space.

The first matter, the EU–Russia Energy Dialogue, began in October 2000 and issued its first report in September 2001. The setting up of this dialogue is a better proof that "something is changing" in the approach to energy matters because, at the beginning, this Dialogue's purpose was said to be "to establish a strategic Energy Partnership. So far energy links have been limited to simple producerconsumer relations. A strong momentum has been generated (...) to develop a political partnership in this area, with the new significance given to energy security". (Report, 2001, p. 1) (EU-Russia Energy Dialogue, 2001) and later on, we find reference to "the energy dialogue (...) arose from the notion that the European continent constitutes a broad geopolitical area (...)." (COM, 2004, p. 1). These statements fuel the hypothesis that within the European Union there is a political will to initiate a new kind of energy policy and that this new policy will be based on the definition of a pan-European space, articulated around energy-related relationships. In fact, in the quoted documents, besides the idea of *energy partnership* we find references, not exactly to the pan-European space, but certainly to a pan-European energy market.

An alliance with Russia would vouch for the creation of that European *geo-energy* space, because it meets all the elements mentioned in part 2 as favourable to the creation of a regional strategy. In the first place—first element established—as can be seen in Table 3, in the scenario of a growing European demand of gas, the Russian Federation will become the first gas purveyor of the European Union—although not at the lower cost, since that will continue to be Algeria.<sup>38</sup>

In the second place, this alliance also seems to match the second condition established, as the European Union believes that "with the high-energy interdependence and complementarily (with Russia) the use of Euro as the reference currency in energy could be considered". In the third place—third element—in front of the growing importance of the USA in the IES, Russia is the only agent with enough weight—Table 2—to provide some multilateralism to the IES. In fact, this must be the idea of the Commission itself, since it contemplates this alliance as a means to develop active regional policies in the sense we have established, because when referring to Russia, it states that "The Russian Federation is not only our most

 $<sup>^{36}</sup>$ An example of this is the case of Algeria. Nowadays, Algeria supplies 30% of the gas consumed by European countries. This figure is even larger when considering the Southern European countries (75% of Spain's natural gas imports, 100% of Portugal's and 54% in the case of Italy). It also contributes about 4–5% of the crude oil. In the case of oil, Algeria's regional role is more modest, both because the country has been subject to OPEC discipline and because of what has already been said about the technically unified crude oil market.

In 2004, we find more than 50 foreign companies operating from Algeria. Between 1999 and 2003 about 8.600 million US dollars were invested in the hydrocarbons sector. Out of this figure, about 10% was directed towards new exploration contracts. This can give us an idea about who is taking positions for the future development of the sector and, at present, two-thirds of the costs of these new contracts have been contributed by non-European countries. In this sense if taken as an indicator of who is going to control the future oilfields, these exploration contracts permit us to elaborate on the hypothesis that North-African oil will probably become part of a trans-national business strategy in which European companies are losing positions, in favour of North-American, Canadian and even Chinese and Russian ones. In addition, these policies have also reduced the weight of the Algerian State as a regional agent. A very simple figure proves this reality: according to data from its Ministry of Energy and Mining, in 2003, 40% of the crude and condensed oil produced in Algeria did not "belong" to the Algerian National Company of Hydrocarbons, SONATRACH.

<sup>&</sup>lt;sup>37</sup>A consideration along these lines can be found in Mañe (2004).

<sup>&</sup>lt;sup>38</sup>In the framework of the regional gas market of what came to be known as the European Union of the fifteen, Algeria was the lower cost gas supplier. The forecast of the OME says that by 2020, the cost of the Algerian gas, transported by pipeline, will oscillate—(royalties excluded) between 1.1\$/MBTU-for the Medgaz from Hassi R'Mel in Algeria to Spain via Almeria-and 1.6\$/MBTU for the gas transported from the same place in Algeria to Italy, via Sicily through the Transmed. In the European Union of the fifteen, these costs are significantly lower than those of the two current producers Norway and Russia, with transportation expenses ranging from 2 to 2.3\$/MBTU. However, in a European Union of 30 members-the present ones plus Bulgaria, Romania and Turkey-the table changes slightly. transportation from Algeria via the Medgaz continues to be cheaper, but the gas from Iraq, Azerbayjan and Iran-via Turkey-will become cheaper that that of the GME, transporting Algerian gas to Spain and Portugal for 1.3\$/MBTU. Furthermore, the costs of 1.6\$/MBTU of the Transmed are on par with those of the Blue Stream from Russia to Turkey.

Table 3 Gas export potential to EU30

	2000	2010	2030
Russia	53.06%	41.93%	31.70%
Norway	20.41%	20.96%	19.02%
Algeria	24.49%	18.87%	18.23%
Libia	0.41%	2.31%	5.55%
Iran	0.00%	2.10%	4.75%
Azerbaijan	0.00%	3.14%	4.75%
Egypt	0.00%	2.52%	3.96%
Nigeria	0.41%	3.14%	3.17%
Iraq	0.00%	2.10%	3.17%
Quatar/UAE/ emen	0.82%	1.89%	2.54%
Trinidad	0.41%	1.05%	1.58%
Turkmenistan	0.00%	0.00%	1.58%
Total (Bcm)	245	477	631

Source: OME, 2001.

important supplier (...), it could also to a certain extent play a moderating role in international markets" (COM, 2004, p. 1). Finally, in a scenario such as the one we have just described, of growing competition for the control of energy supplies, a *strategic Energy Partnership* with Russia seems to be a good way to secure a steady supply of hydrocarbons.<sup>39</sup>

Because of this, whereas the elaboration of the Green Book is indicative of the EU's intention of setting up new kinds of European energy policies, the EU–Russia Energy Dialogue represents—theoretically—a significant step towards an energy policy based on a regional approach. This would be so, because, as we have recently established, in the pan-European space contemplated by this Dialogue, all the factors concur that it would propitiate the creation of a regional strategy. Furthermore, the EU admits that the creation of an area consistent with the concept we have established as *geo-energy* space will not only secure the energy supply for the economies of the said region but will, as a whole, become a valid instrument to have a say in the IES.

The second element that we have put forward—the incorporation of Turkey into the EU—could become the key element for the culmination of the creation of a pan-European *geo-energy* space. Let us go into this in some detail.

In the first place, Turkey, as a dealer of hydrocarbon products, can become a significant purveyor of primary energy to the EU.

Because of its geographical position, and due to the current design of the oil and gas pipeline's network, and of the shipment routes for hydrocarbons from the Mediterranean, Persian Gulf and Russia to Europe Turkey holds the key that will grant admittance into Europe to most of the Russian, Central Asian, Persian and Mediterranean gas and oil. In fact, the estimation is that by the year 2020, Turkey will be processing the surplus of the approximately 120 Bcm of gas that will arrive into the country. This should make Turkey the third largest gas supplier of Europe, after Russia and Algeria. We should add to this the existence of the Baku–Cevlan oil pipeline, and the fact that a great deal of the oil from former Soviet territories (between 2,000,000 and 2,600,000 br/day, to be re-exported by Turkey) comes to Europe via the Bosporus Strait. According to these data, it is very much possible that in the near future, this country, although not a producer, might become one of the main (re)exporters of gas and crude oil of the region. The estimate that in the future 70% of all new gas supplies to the EU will come from Turkey does corroborate this hypothesis.

In the second place and as a consequence of what has been stated, Turkey—as can be seen in the map—becomes the link between the European Union and its two "natural" areas of influence *geo-energy* wise: the pan-European space—comprised by the Southern shore of the Mediterranean- and Russia. For this reason, apart from becoming a privileged purveyor of the EU, Turkey will be the actual, physical, piece needed to complete the current pan-European energy map. What is more, this piece will become even more necessary when Bulgaria and Romania become members of the European Union in 2007, because the inclusion of these countries can open new routes of access into Europe for the Central European hydrocarbons.

Lastly, it is important to point out that Turkey is a type of energy agent traditionally not contemplated within the energy structure. It cannot be allocated either to the category of a producer State nor to that of a consumer government as seen in Fig. 1. In fact, it is a completely new kind of agent, a product of certain energy de-regulation policies that have propitiated the creation of companies specializing exclusively in the buying and selling of energy (Enron is, sadly, the most famous example). It is also the result of an international geo-strategy move which ended up making Turkey one of the main energy passages of the world, so as to prevent "non-friendly" countries like Russia, Iran or Iraq from becoming vital. This is a new type of agent, which, in our graphic, should be placed in the central part of the energy's chain of production (in the transport), but one that exists under "political" control. Because of this and from a geo-strategic point of view, on top of being the key member of the pan-European geoenergy space, Turkey is also the strategic key of the regional energy industry.

Thus, Turkey's role as an energy passage provides us with three reasons to believe that its incorporation into the

<sup>&</sup>lt;sup>39</sup>All the Russian natural gas comes to the EU by pipeline. After recent enlargement, two other lines reach the EU: the *Northern Lights*, that comes into Europe through Byelorussia, where it connects itself to the Yamal-1which, in turn, crosses Poland and ends up in Germany; and the *Brotherhood*, entering Europe via Ukraine, that goes across Slovakia and the Czech Republic to Germany, Austria, Switzerland and Italy. As to the crude oil, one of the supply routes is through the Druzba pipeline and the Baltic ports via Latvia and Germany. For more information, see Nuñez (2003).

European Union would propitiate the creation and consolidation of our hypothetical pan-European *geoenergy* space: Turkey is to become an important supplier of hydrocarbons; geographically, Turkey is the *heartland* of our pan-European proposition; and finally<sup>40</sup> Turkey is destined to become an intermediary in the relationships to be established amongst the energy agents operating in the region (be them public, private, regional or foreign)

For all these reasons, we consider that within our hypothetical pan-European *geo-energy* space Turkey is the most valuable instrument of energy policy because both from the geographical point of view and from the sector's position, it could become a powerful re-regulation<sup>41</sup> tool in the *governance structure* of the region. From this perspective, although doubts may persist as to whether Turkey does belong to the same geopolitical space as the EU,<sup>42</sup> from the *geo-energy* point of view, this is not only self-evident but also extremely convenient for the region, since this is the energy agent that amalgamates the pan-European security community and helps to palliate the loss of weight of the regional agents of the Euro-Mediterranean area, while compensating for the excessive influence of those from the Russian Federation.

All this brings us to establish that the existence of the EU-Russia Energy Dialogue and the future incorporation of Turkey-if it does take place-is the foundation from which a hypothetical pan-European *geo-energy* space can be built: a community of energy security which constitutes itself as a regional energy agent in the IES. From this point of view, the future enlargement would suppose the voluntary incorporation that is needed for the creation of the pan-European *geo-energy* space. The integration that has already taken place makes the creation of the *strategic* Energy Partnership almost inevitable, since it brought to the EU the areas which, energy wise, link Europe to Russia-and are, indeed, frontier territories-thus consolidating, de facto, the pan-European space. The 2007 enlargement will contribute a new energy passage from the Mediterranean to Central and Western Europe and finally, Turkey's incorporation will be the cement that will bond together the pan-European *geo-energy* space, as defined, and will make possible its regulation.

In our view, the regional strategy will fail if the presence of the above-mentioned elements proves to be insufficient to modify the present course of Europe's energy policy and if this policy, beyond the discourse, continues to be committed to a narrow view of the M&I approach.

An indication that this can actually occur are the policies established after all the good-will declarations contained in the EU—Russia Energy Dialogue. In fact, while reading the succeeding reports of the EU-Russia Energy Dialogue it can be perceived that one of the great concerns of the EU is to get Russia to ratify the Energy Charter (Report 2001, p. 3) to create the optimum pan-European market. As we established in part one of this paper, this is the wrong energy policy and it also undermines the declared objectives of the mentioned Dialogue because it is rather insensitive to the Russian needs (TREN/C1, 2002, p. 143). In fact, this initiative is rather more unilateral that bilateral, inasmuch as it infers that the only natural market for the Russian hydrocarbons would be Europe (Report 2001:2 y COM, 2004, p. 6), when in fact, due to Russia's geographical situation and transportation network, there are alternative markets for its oil,<sup>43</sup> the CIS and Asia being the most important ones. The stated position implies, as well, that the Russian energy sector would be similar to that of the OPEC's Arab countries (a disarticulated sector, with no internal market, intended exclusively for the exportation of oil and gas and dependent on foreign technology and financing)-Report 2001, p. 4-, when, as seen in Table 2, it is quite the opposite. And lastly, this EU policy takes for granted that the privatized Russian companies are willing to enter into alliances with the European majors (COM, 2004 p. 4) instead of doing so with the State or the Russian Regions; in fact, recent developments around the Yukos affair prove that the russification of the sector, as studied in part 2, is becoming a very plausible option.

In short, "the EU approach of Russia is concurrent with the Market and Institutions approach that comports neatly with the EU liberalisation project" (TREN/C1, 2002, p. 143). The implementation of this kind of policies is bound to fail: they are addressed to a country that does not seem enthusiastic about the penetration of foreign capital and to an energy sector that wishes to remain Russian, within an economy that, according to all the transition indicators of the EBRD, is far from possessing the institutions that would make possible the creation of a pan-European energy market through some neo-liberal reforms.

Considerably all this, it is reasonable to ask why the EU continues to apply energy policies based on the M&I approach, when its declared intention is to adopt a regional strategy and it is in possession of the elements that would allow it to do so. We can only think of two possible answers. The first one is that these policies continue to be implemented because they are the only viable ones in today's European Union -since they are beyond the scope of the Policy, and the Polity-and because, apparently, they do not question the interests of the National States. The second reason why these policies are still in existence would be that the statesmen of the EU have ceased to observe the actual world around them and continue to sustain a point of view typical of the 1970s, stubbornly thinking of the IES as a battlefield of antagonistic interest. Both explanations are worrying because the first one would

<sup>&</sup>lt;sup>40</sup>Somewhere I argue that this energy heartland is a wider Central Asia. See Mañé (2005b).

<sup>&</sup>lt;sup>41</sup>Today, Transneft is playing this role in Russia because, being controlled by the Central Government, it is used to regulate the actions of the private companies of the sector and of the regional powers, according to the interests of the State—or those of Putin.

<sup>&</sup>lt;sup>42</sup>See Sánchez-Gijón (2004).

 $<sup>^{43}</sup>$ In fact oil exports to the EU are 45% of the total.

invalidate any attempt to apply European energy security policies based on the *geo-energy* approach, and the second would entail EU's loss of importance in countries of the pan-European area which are unwilling to be treated as mere oil enclaves, because they are not.

# 5. Conclusions

To sum it all up, this article establishes that the M&I has led to policies which are unsound and do not improve the European energy security. That is why in the second section of the paper we explore the elements currently existing for the creation of a regional strategy.

The conclusion is that there is room for a European regional strategy because of the growing importance of gas, the birth of the Euro, the fact of Russia being a "nonaligned" energy agent and, lastly, the expected scarcity and the greater interest in securing the energy supply. Therefore, the next question the paper answers is about the kind of European regional strategy to be implemented.

After a brief methodology explanation, in part three we propose a new way of understanding energy policies and we define, by way of analogy to the classical vision of geopolitics, the pan-European *geo-energy* space: a geographical space where a precise set of energy relationships take place, among different agents—*producer states, enterprises* and *consumer governments*—who are active within it, and whose borders are wider than those of the present-day European Union—the current Euro-Mediterranean and the eastern Euro-Asian territories. Furthermore, we claim that the creation of the stated *geo-energy* space will give Europe an instrument to establish better relationships and bring about a higher degree of multilateralism in the international energy scene.

Lastly in the final part, the paper explains that there do exist necessary elements to promote the creation of a pan-European *geo-energy* space. These are the EU–Russia Energy Dialogue launched in 2001 because it would help to establish a strategic energy partnership, and the possible enlargement towards Turkey, because this embodies in the EU the *heartland* and the regulatory intermediate of the proposed *geo-energy* space. Nonetheless, as seen with the Russian example, the particular policies proposed by the EU continue to be weighed down by the narrow M&I way of thinking. From this point of view, it would be very difficult, if not impossible, to achieve the wishes of the European Commission: *the development of a real energy community in the wider European area.* 

## References

- Andreff, W., 2003. Las empresas multinacionales rusas: inversión directa de Rusia en el exterior. Información Comercial Española, Revista de Economía, 805, March.
- Auty, R.M., 1993. Sustaining Development in Mineral Economies: The Resource Curse Thesis. Routledge, London.
- Barnett, S., Ossowski, R., 2003. Operational aspects of fiscal policy in oilproducing countries. In: Davis, J.M., Ossowski, R., Fedelino, A.

(Eds.), Fiscal Policy Formulation and Implementation in Oil-Producing Countries. IMF, Washington DC.

- Bindemann, K., 1999. Production-Sharing Agreements: An Economic Analysis. OIES, WPM25.
- Cayrade, P., 2004. Investments in gas Pipelines and Liquefied Natural Gas Infrastructure. What is the impact on the Security of Supply? Note de Lavoro 111.2004. IEM. Fondazione Eni Enrico Mattei.
- Ciep, 2004. *Study on Energy Supply Security and Geopolitics*. Final Report prepared for DGTREN. TREN C1/06 2002. ETAP Programme.
- Commission of the European Communities, 2003. On the Development of Energy Policy for the Enlarged European Union, its Neighbours and Partner Countries, COM (2003) 262 final.
- Commission of the European Communities, 2004. The Energy Dialogue between the European Union and the Russian Federation between 2000 and 2004, COM (2004) 777 final.
- Chévalier, J.M., 1974. La baza del petróleo. Laia paperback, Barcelona.
- EIA, 2004. Country Analisis Report USA. http://www.eia.doe.gov/emeu/ cabs/usa.html.
- Energy Charter Treaty, http://www.encharter.org.
- Erzan, R., 1999. Regionalismo y globalización en el contexto de los acuerdos euromediterráneos". In: Bacaria, J., Tovias, A. (Eds.), Librecambio euromediterráneo. Icaria Antrazyt.ICM, Barcelona.
- EU-Russia Energy Dialogue, 2001, Synthesis Report, http://europa.eu.int/ comm/energy/russia/overview/index en.htm
- Guez, O., 2003. Le grand jeu pétrolier de Washington, Problèmes économiques, 2.818, 10–15.
- IEA 2002. Russia Energy Survey 2002.
- IEES 2003. La energía en el espacio euromediterráneo, Ministerio de Defensa, Cuadernos de Estrategia, 122
- Jensen, J.T., 2004. The Development of Global LNG Market: It is Likely? If so When? OIS. Oxford University Press, Oxford.
- Locatelli, C., 2004a. La place des investissements internationaux dans l'industrie pétrolière russe, Courrier de l'Est, November.
- Locatelli, C., 2004b. L'industrie pétrolière russe entre la gouvernance publique et privée: les obstacles aux stratégies d'entrée des compagnies internationales. Cahier de Récherche LEPII, Série EPE, 35.
- Looney, R., 2004. Petroeuros: a threat to US Interests in the Gulf?, Middle East Policy, IX 1, 26–37.
- Lorca, A., 2004. Hacia un nuevo orden mundial basado en la geografía. Consideraciones conceptuales para las relaciones euro-mediterráneas. In IEES (2004); El Mediterráneo en el nuevo entorno estratégico, Ministerio de Defensa, Cuadernos de Estrategia, 125, (Chapter III).
- Mañé, A., 2004. El nuevo mapa energético. In: MED. 2003. Anuario del Mediterráneo, IEMed/Fundación CIDOB, pp. 192–193.
- Mañé, A., 2005a. European Energy Security: towards the creation of the geo-energy space. Paper presented at the Sixth Mediterranean Social and Political Research Meeting of the Mediterranean Programme of the Robert Schuman Centre for Advanced Studies at the European University Institute, Montecatini Terme, March 2005.
- Mañé, A., 2005b. Territorios ricos en hidrocarburos de Asia central: ¿países productores, enclaves exportadores o países de tránsito? Afers Intenacionals 70–71 (next issue).
- Martin-Amoroux, J.M., 2003. La restructuration des industries de l'énergie dans la mondialisation économique. Paper presented at the International Colloquium "Energía, Reformas Institucionales y Desarrollo en América Latina", UNAM, Novembre.
- Marzo, M., 2004. *Reservas técnicas y políticas*. La Vanguardia Dinero, 5 September.
- Mitchell, J., 2004. *Petroleum Reserves on Question*. SDP BP 03/04. Chapman House, OIES.
- Mommer, B., 2000. *The Governance of International Oil. The Changing Rules of the Game*, OIES WPM 26, Oxford Institute for Energy Studies.
- Mommer, B., 2002. Global Oil and the Nation State, OIES, Oxford University Press.
- Nitzan, J., Bichler, S., 2002. The Global Political Economy of Israel, Pluto Press.

- Nitzan, J., Bichler, S., 2003. *It's All About Oil*, http://www.nubeli.org/anti-K/nitzan-bitchler.htlm
- Noël, P., 2003. La politique pétrolière américaine: une dépendance acceptée et assumée. Problèmes économiques 2.818, 1–10.
- Nuñez, J., 2003. Flujos energéticos hacia la Unión Europea (Los casos Noruego y Ruso). In: IEES (2003). La energía en el espacio euromediterráneo, Ministerio de Defensa, Cuadernos de Estrategia, 122 (Chapter VI).
- Paliashvili, I., 1998. *The Concept of Production Sharing*, Minutes of the Seminar on Legislation of the Production Agreements. September, Ucraine.
- Perthes, V., 2004. America's "Greater Middle East" and Europe: Key Issues for Dialogue. Middle East Policy XI, 3, 85–97.
- Sánchez-Gijón, A., 2004. Geopolítica y la cuestión turca, Política Exterior, 101, September/October, pp. 83–96.
- Stevens, P., 2003. *Resource impact: curse or blesing? A literature survey.* The Journal of Energy Literature IX,1.