

Cyprus Hydrocarbons: Analysis of the Strategic Development Options

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ABSTRACT: *Cyprus recently announced the discovery of significant amounts of hydrocarbons in its exclusive economic zone (EEZ). This discovery of gas is viewed by the Republic of Cyprus to be the only solution for its bailout. Cyprus has tried to complete the puzzle on how to optimally handle this new environment of opportunities and threats but unfortunately experience is lacking. In the previous year, Greece, who is Cyprus' most important ally, lost its political clout and the weight of its influence not only to the Republic of Cyprus but also in general to the Mediterranean "chessboard" due to its dramatic current economic conditions. Hence, Cyprus is looking for a new and strong ally in order to optimally handle this new environment and it appears that such an ally has been found in the State of Israel. In the light of the economical and current political conditions, we examine the export options open to the Republic of Cyprus: to build a gas pipeline via Turkey; to create a joint pipeline with Greece and Israel that will pass through Greece; or to create an energy joint venture with Israel for an LNG plant construction in Cyprus. We conclude that, while the option of building a gas pipeline via Turkey could give higher cost advantage and profits to Cyprus compared to the other strategic choices, the most attractive strategic choice out of the three is the creation of a joint venture with Israel in order to construct an LNG plant in Cyprus.*

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Abbreviations

EEZ	Exclusive Economic Zone
LNG	Liquefied Natural Gas
TRNC	Turkish Republic of Northern Cyprus
EU	European Union
TCF	Trillion Cubic Feet
KRETYK	Cyprus National Hydrocarbons Company

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1. Introduction

Cyprus and Israel recently announced that they have discovered significant amounts of hydrocarbons in their exclusive economic zone (EEZ).¹ These significant discoveries, combined with the on-going Cypriot dispute with Turkey since 1974 and the serious and interwoven events between Israel and other countries in the region, leave the Mediterranean region looking like a nuclear bomb ready to blow up.² According to analysts this storm created in the region will not only affect the geopolitical relationships between the regional countries but will reach far beyond the shores of the small Mediterranean 'Lake', since the recent discoveries are expected to bring a lot of changes to the global energy market.³

The Republic of Cyprus views the recent discovery of gas as the primary solution for its bailout as it has recently been hit hard by the financial crisis.⁴ Cyprus is therefore trying to work out ways in which to effectively handle this new environment of opportunities and threats but unfortunately lacks experience in this arena. The political tensions and uncertainties surrounding its EEZ in conjunction with the inability of Greece to continue supporting Cyprus under its diplomatic and military security umbrella, have lead Cyprus to the most difficult and complex situation in its modern history, which calls for the right decision in order to be overcome. The aim of this paper is to analyse and discuss within an economical and political context the three main strategic options that Cyprus has in order to export its gas to the potential destination: to build a gas pipeline via Turkey; to create a joint pipeline with Greece and Israel that will pass through Greece; or to create an energy joint venture with Israel for an Liquefied Natural Gas (LNG) plant construction in Cyprus.

2. Strategic Alliances Literature Review

Strategic alliances are defined as the partnerships between two or more entities which share activities or resources in order to achieve their major objectives.⁵ These alliances play an

¹ Al Jazeera (2010) Israel confirms major gas find. *Al Jazeera English*, [online] 30 December. Available at: <http://www.aljazeera.com/business/2010/12/20101230185238763632.html> [Accessed: 20 Apr 2013].

² Engdahl, F. (2012) The New Mediterranean Oil and Gas Bonanza. *Global Research*, [online]

3 March. Available at: <http://www.globalresearch.ca/the-new-mediterranean-oil-and-gas-bonanza/29609> [Accessed: 22 Apr 2013].

³ Stavris, G. (2012) The New Energy Triangle Of Cyprus-Greece-Israel: Casting a Net For Turkey?. *Turkish Policy Quarterly*, 11 (2), pp.87-102.

⁴ Shah, D. (2013) Can gas reserves rescue Cyprus? *Interactive Investor*, [online] 22 March. Available at: <http://www.iii.co.uk/articles/82428/can-gas-reserves-rescue-cyprus> [Accessed: 22 Apr 2013].

⁵ Johnson, G., Scholes, K., Whittington, R. (2011) *Exploring strategy*. Harlow: Financial Times Prentice Hall, p.338.

important role for organizations in order to gain competitive advantages across the market. However, this is only one side of the coin, as strategic alliances can also result in a spectacular failure, leading the organisation to an extremely difficult situation. The two main types of strategic alliances are: the equity alliances, which involve the creation of a completely new entity owned separately by the partners, and the non-equity alliances, which typically involve a contractual agreement between the partners.⁶

2.1. Strategic motivation for Strategic Alliances

The definition of strategic alliances highlights, as a key motivation, the concept of sharing (activities or resources). However there are more important reasons and motives which may be less obvious. Scientists have identified a number of motives for strategic alliances in the oil and gas sector, but the main objective for is to achieve the necessary scale.

Partners may have the same or similar capabilities but together they will be able to achieve competitive advantages that they couldn't ever manage on their own. Hence, through the partnership, organisations can provide economies of scale in production of output and gain a better market share or position in a particular product or a geographic area.⁷ In addition to this, organisations may optimize their downstream supply chains across various areas. As a result entities could create value for their assets. For example, the majority of gas pipelines and LNG joint ventures in the world are based upon the participants in the market supply and supply chain optimization.⁸

Moreover combining together might also provide economies of scale of inputs in the sense of reducing the high capital investment which oil and gas activities require from a single company. Examples of this category are the gas pipelines and the liquefied natural gas (LNG) plants.⁹ Furthermore the oil and gas field requires complex and high-tech technologies which the legal resource owner may not have. A joint venture may provide the capabilities, technology, the knowledge or the ability needed for an organisation to develop its own resources to their maximum potential.¹⁰

⁶ *Ibid.*, p.340

⁷ Ernst & Young's Global Oil & Gas Center (2010) *Navigating joint ventures in the oil and gas industry*. [report] Ernst & Young's, pp.1-9.

⁸ Owuor, F. (2007) Challenges Faced By Oil Terminal Joint Ventures in Kenya. [report] Nairobi, Kenya: School Of Business, University Of Nairobi, pp.4-11.

⁹ Marks, M. and Mirvis, P. (2010) *Joining forces*. San Francisco, Calif.: Jossey-Bass, pp. 6-19.

¹⁰ Martin, J. (1998) Strategic Alliances in the Mineral Resources Industry in the 1990s: Selected Factors and Considerations in Drafting Successful Joint Venture Agreements. *Rocky Mountain Mineral Law Foundation*, 44

Finally, as oil and gas activities include a high level of risk that companies usually aren't fully exposed to, a partnership can provide a mitigation of those risks as it allows the partners to share the risks. As a result organisations can have a better and more viable risk profile.¹¹

2.2. Strategic Alliances Challenges and Key Success Variables

Many studies indicate that despite the high rate of failure, strategic alliances may still be the best choice for an organisation in certain circumstances. Studies have also identified the major issues and challenges which an organisation must face in order to achieve an efficient strategic alliance.¹²

The primary issue that organisations must examine before creating a partnership is whether or not the partners are compatible. The compatibility of the organisations can be analysed in two main dimensions: the strategic fit and the organisation fit. The strategic fit refers to the extent to which the partner suits the desired strategy. The partner should complement or strengthen the organisation's strategy. The organisational fit refers to whether there is a match between the organisation's cultures and management practices. In particular, the differences between cultural and management practices are very difficult to manage in cases where people and resources play an important role. Another crucial issue is the valuation. Partners must assess their relative contribution equitably and accurately in order to avoid mistrust between them and to ensure that the level of the resource commitment is in line with the return and control of each partner.¹³

Strategic alliances create a new form of accountability between their partners which rely primarily on trust. A situation where there is hostility or mistrust between the parties could lead to an inefficient and ineffective partnership.¹⁴ Moreover the key variables for an effective partnership – regarding the successful resolution of all the challenges and issues that may arise as quickly as possible – can be viewed around three main themes: communication, openness and ethos.¹⁵

Communication within alliances is a crucial factor for the coordination and direction of the effort towards the success of the objective strategy. Internal communication helps all the

¹¹ Derman, A. (1999) Alliances: Making the most from Combinations. *Institute on Oil and Gas Law and Taxation*. , 50, pp. 8-1 - 8-30.

¹² *Supra.*, note 9

¹³ *Supra.*, note 6, p.332

¹⁴ *Ibid.*, p. 342

¹⁵ Wallace, R. (2004) *Strategic partnerships*. Chicago, IL: Dearborn Trade Pub., pp. 61-79.

parties to be informed and involved in the new initiatives and strategies.¹⁶ Openness is considered as one of the main prerequisites for strategic alliance success and lack of trust is a major reason for their failure. It has been argued that trust and control are inextricably interlinked with risk in strategic alliances.¹⁷ Hence, the only way for partners to manage this risk adequately is by understanding conjoint roles of trust and control.

The good relationship and trust between partners at all levels, is an issue that plays an important role in addressing all the challenges that arise. Moreover non-adequate strategic planning, poor strategic execution and management, can cause tremendous and costly problems. As the motive drivers of each partner, behind these strategic alliances are usually not congruent with the strategic direction of the alliance, the strategic planning enables the co-ordination among the parties to enhance flexibility and priority setting.¹⁸ Ethos is defined as people's spirit or attitudes. It usually implies the differences in management styles and practices, the different objectives, and the different cultures which may lead to lack of trust between the parties and to conflicts that may arise when the time for important decision-making comes.¹⁹

3. The Case of Cyprus

3.1. Historical context

The Republic of Cyprus is the third largest island in the Eastern Mediterranean Sea and gained its independence in 1960. After the Turkish military invasion of Cyprus in 1974, the island was divided into two parts: the Turkish-speaking part in the north and the Greek-speaking part in the south. The Turkish armed forces have not withdrawn since and still occupy approximately one-third of the island (Map 1).²⁰

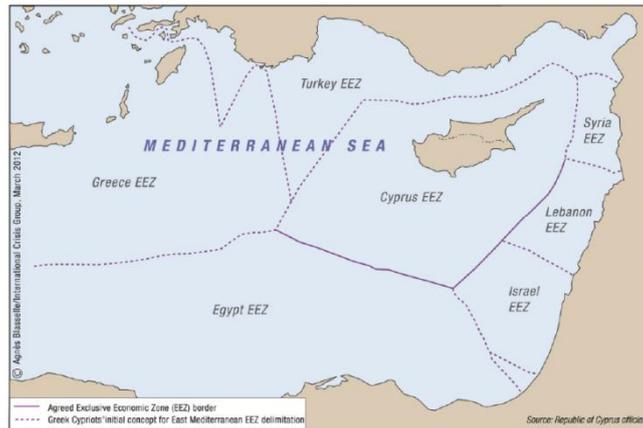
¹⁶ *Ibid.*

¹⁷ Whipple, J. and Frankel, R. (2000) Strategic Alliance Success Factors. *The Journal of Supply Chain Management*, 36 (3), pp.21-27.

¹⁸ *Supra.*, note 8, pp.17-26

¹⁹ *Supra.*, note 16

²⁰ Cyprusembassy.net (1960) *Official Website of the Embassy of the Republic of Cyprus in Washington D.C.* [online] Available at: <http://www.cyprusembassy.net/home/index.php?module=page&pid=8> [Accessed: 22 Apr 2013].



Map 1: Maritime boundaries of the Republic of Cyprus (Source: International Crisis Group)

In 1983 the Turkish-speaking part unilaterally declared independence as the "Turkish Republic of Northern Cyprus" (TRNC) which is not recognised by the international community as a legal state (Map 2).²¹ On the other hand the Republic of Cyprus, apart for Turkey who does not acknowledge it, is internationally recognized and since 1st May 2004 is a full member of the European Union (EU).²² The poor political and diplomatic relations between Ankara and Nicosia since 1974 have become even worse due to consecutive vetoes by Cyprus of Turkey's own access to the EU.



Map 2: Cyprus (Source: Central Intelligence Agency)

3.2. Hydrocarbons of the Republic of Cyprus

3.2.1. First licensing round

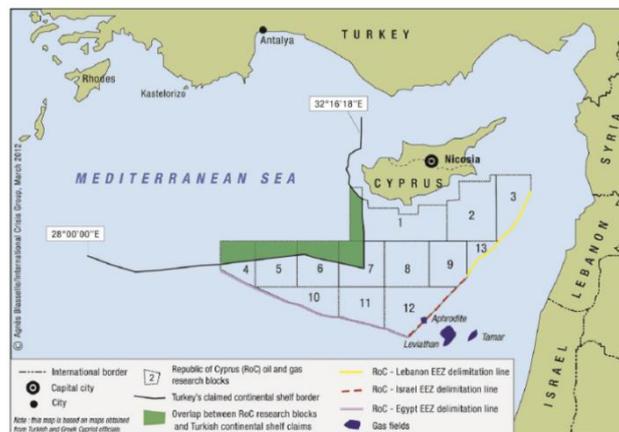
In February 2007 Cyprus proceeded with its first round of exploration and extraction licensing for its eleven off-shore blocks, but the results were disappointing as the auction

²¹ BBC (2013) Cyprus profile. *BBC News*, [online] 2 April. Available at: <http://www.bbc.co.uk/news/world-europe-17217956> [Accessed: 17 Apr 2013].

²² European Union (2013) *European Union Member Countries*. [online] Available at: http://europa.eu/about-eu/countries/member-countries/cyprus/index_en.htm [Accessed: 17 Apr 2013].

attracted only three bids.²³ In 2008, the Cypriot government announced that Noble Energy had won the rights from the first licence round to commence explorations in Block 12 (Aphrodite gas field - Map 3) which is located near the Israeli EEZ where hydrocarbons have already been discovered by Noble Energy (Tamara and Leviathan oil fields).²⁴

In December 2011 Noble Energy announced that it had obtained approval to transfer 30% of its rights in the Aphrodite field to the Israeli company Delek Group.²⁵ In the same month (December 28th2011) Noble Energy announced a significant natural gas discovery in the Aphrodite gas field. The initial evaluation for a gross resource range was between 5 trillion cubic feet (Tcf) and 8 Tcf, with a 75% and 25% probability of being exceeded respectively.²⁶



Map 3: Exploration blocks in the Republic of Cyprus (Source: Ministry of Commerce, Industry and Tourism of the Republic of Cyprus)

3.2.2. Second licensing round

On the 11th of February 2012, the Republic of Cyprus announced that they were starting the second licence round in order to give new hydrocarbon exploration and exploitation licenses with regard to the remaining blocks in its EEZ (Blocks 1-11, 13).²⁷ Due to the significant

²³ Mcit.gov.cy (2007) Ministry of Commerce, Industry and Tourism - Hydrocarbon Exploration - *First Licensing Round* (2007). [online] Available at: <http://www.mcit.gov.cy/mcit/mcit.nsf/All/FE3EB5707ADA0E6EC225771B0035B0D2?OpenDocument> [Accessed: 22 Apr 2013].

²⁴ Noble Energy (2008) *Recent Discoveries* - [nobleenergyinc.com](http://www.nobleenergyinc.com/Exploration/Recent-Discoveries-130.html). [online] Available at: <http://www.nobleenergyinc.com/Exploration/Recent-Discoveries-130.html> [Accessed: 24 Apr 2013].

²⁵ Hazou, E. (2013) 'A new era of strategic partnership'. *Cyprus Mail*, [online] 12 February. Available at: <http://www.cyprus-mail.com/avner-oil-gas/new-era-strategic-partnership/20130212> [Accessed: 23 Apr 2013].

²⁶ Noble Energy (1998) *Eastern Mediterranean* - [nobleenergyinc.com](http://www.nobleenergyinc.com/Operations/Eastern-Mediterranean-128.html). [online] Available at: <http://www.nobleenergyinc.com/Operations/Eastern-Mediterranean-128.html> [Accessed: 22 Apr 2013].

²⁷ Mcit.gov.cy (2007) *Ministry of Commerce, Industry and Tourism - 2nd Licensing Round - Hydrocarbon Exploration*. [online] Available at: http://www.mcit.gov.cy/mcit/mcit.nsf/dmlhcarbon_en/dmlhcarbon_en?OpenDocument [Accessed: 23 Apr 2013].

evidence of the recent discoveries in the Aphrodite gas field and also of the discoveries in the Leviathan and Tamar fields in the Israeli EEZ, the attractiveness of the second licence round was greater and much more successful (15 bids) compared to the first one (3 bids).²⁸

In late October 2013, the Republic of Cyprus announced that they had decided to launch negotiations for four new licences for Blocks 2, 3, 9 and 11, which are located to the north and north-east of the Aphrodite gas field. The license for Blocks 2 and 3 went to a consortium led by the Italian company ENI S.p.A. and Korea Gas Corporation (Kogas); Block 9 to a consortium led by Total E&P Activities Petrolieres and the Russian companies Novatek and Gazprom's GPB Global Resources; and Block 11 to the company Total E&P Activities Petrolieres.²⁹

This discovery in the Aphrodite gas field put Cyprus on the world energy map once and for all. According to analysts the huge recent discoveries of oil and gas reserves in the Mediterranean Sea between Cyprus, Israel, Greece, Turkey, Syria and Lebanon indicate that the Mediterranean region is going to become a “new Persian Gulf” in the sense of oil and gas reserves.³⁰ However, as was the case with the oil and gas discoveries in the Persian Gulf, this situation may lead the region to greater instability from the already existing geopolitical conflicts between the countries.³¹

The Republic of Cyprus has expressed interest in becoming a natural gas exporter, as the longer-term domestic gas requirements in Cyprus are fairly small. This means that the majority of natural gas production will be exported in foreign markets. According to Dr. Charles Ellinas, the Chairman of the Cyprus National Hydrocarbons Company (KRETYK), the main gas market which Cyprus will target for exportation is Europe.³²

²⁸ Cyprus Gas News (2012) 15 firms to bid for gas drilling rights off Cyprus. *Cyprus Gas News*, [online] 11 May 2012. Available at: <http://www.cyprusgasnews.com/archives/416> [Accessed: 23 Apr 2013].

²⁹ Butler, N. (2013) Gas in Cyprus – how much of a guarantee?. *Financial Times*, [online] 17 March . Available at: <http://blogs.ft.com/nick-butler/2013/03/17/gas-in-cyprus-how-much-of-a-guarantee/> [Accessed: 22 Apr 2013].

³⁰ Giamouridis, A. (2013) The Offshore Discovery in the Republic of Cyprus: Monetisation Prospects and Challenges. *Global Energy Law & Regulation Portal*, 11 (3).

³¹ *Ibid.*

³² Ayat, K. (2013) *Interview with Dr. Charles Ellinas and Mr. Solon Kassinis, Cyprus National Hydrocarbons Company (KRETYK)*. Interviewed by Natural Gas Europe [in person] 2nd Annual Cypriot-Greek Oil& Gas 2013, 22 April 2013.

4. Case Analysis

4.1. European Market

For its current energy demand, Europe depends on Russia, since its share is 36% of Europe's total natural gas supply (Figure 1).³³ This Russian monopoly and its control of the natural gas price in Europe combined with the dramatic event in the winter of 2008 when Ukraine cut the gas flow to many central European houses because of its conflict with Russia forced Europe to rethink its energy strategy and seek to reduce her dependence from Russia.³⁴ Europe's willingness to diversify its gas supply could represent a unique opportunity for Cyprus to achieve long-term agreements.

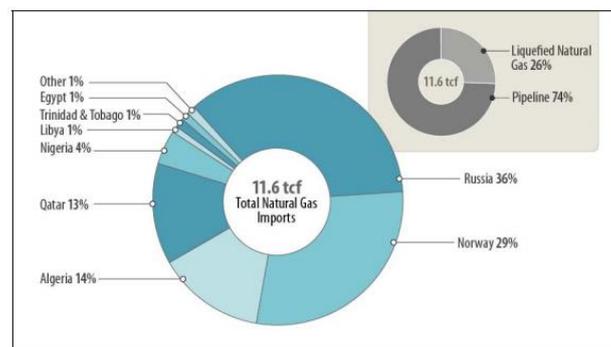


Figure1:2011 EU Natural Gas Imports (Source: BP Statistical Review of World Energy 2012)

It seems to be a great and easy opportunity for Cyprus without complications and risks but in reality it is not as easy as it seems. This situation may appear to challenge Russia's domination of Europe's gas supply. The threat of losing some of its market share is not the actual threat for Russia. The real threat is that a marginal addition of gas supply to Europe, such as from Cyprus, could create an oversupply. As a result of this oversupply, gas prices may drop sharply in the European region, even to a lower point than the marginal cost of exporting natural gas from Russia. This situation would really challenge the economic stability and viability of Russia's gas companies.

Russia is aware of the eastern Mediterranean supply threat and that Europe is willing to move away from Russian gas dependency. That is why Moscow is constantly attempting to get involved in the Cypriot and Israeli gas energy bonanza. In the second licence round the Cypriot government announced that they had reached an agreement with a consortium led by

³³ Ratner, M., Belkin, P., Nichol, J., Woehrel, S. (2013) *Europe's Energy Security: Options and Challenges to Natural Gas Supply Diversification*. [report] Congressional Research Service.

³⁴ BBC (2009) Russian gas to Europe 'blocked'. *BBC News*, [online] 13 January . Available at: <http://news.bbc.co.uk/1/hi/world/europe/7826142.stm> [Accessed: 17 Apr 2013].

GPB Global Resources which is Gazprom's subsidiary (35.54% shares) and by two other companies.³⁵ Moreover on February 26th, the Russian global energy giant, Gazprom, clinched agreement deal for the next 20 years for the market of Israeli liquefied natural gas (LNG), from the Tamar offshore field.³⁶

At this current stage Cyprus has some opportunities to sell its gas to Europe. However the hydrocarbon exportation has several issues and challenges which Cyprus needs to face by using the right strategy. The strategic options for gas exportation that Cyprus current has are:

1. Constructing an export gas pipeline to Europe via Turkey.
2. Creation of an energy joint venture between Cyprus, Greece and Israel in order to construct a pipeline that will pass through Greece to Europe.
3. Creation of an energy joint venture between Cyprus and Israel for the construction of an LNG plant in Cyprus.

4.2. Gas pipeline to Europe via Turkey

Turkey's objective of becoming a major energy hub made its government use several ways in which to convince Cyprus that the pipeline through Turkey is the optimal way for its natural gas exportation to the EU. Turkish has even invoked the Cyprus problem as a benefit of constructing such a pipeline, with Turkish Energy Minister Taner Yildiz stating (in December 2011) that if Cyprus signs an energy cooperation agreement with Turkey then they would provide a successful negotiation of the Cyprus problem.³⁷

On the commercial level, potential sales of Cypriot gas to Turkey via pipeline would probably offer higher returns to Cyprus compared with all the other strategic choices (€15 billion more net revenue),³⁸ since the pipeline would require little up-front investment and the transportation costs from the Cypriot upstream to the Turkish downstream gas market would be significantly small. Moreover, the period of time needed for building such an infrastructure is much less compared with the other options and the revenues which Cyprus

³⁵ Gazprombank.ru (2012) *Gazprombank - The shareholders of Gazprombank*. [online] Available at: http://www.gazprombank.ru/eng/about/shareholders/index.php?phrase_id=7829030 [Accessed: 23 Apr 2013].

³⁶ Shiryaevskaya, A. (2013) Gazprom Seeks to Export All LNG From Israeli Tamar Project. *Bloomberg*, [online] 26 February. Available at: <http://www.bloomberg.com/news/2013-02-26/gazprom-holds-talks-to-export-all-Ing-from-israeli-tamar-project.html> [Accessed: 26 Apr 2013].

³⁷ Turkish Weekly (2013) Turkish Minister: Anatolia only feasible gas route for Israel, Greek Cyprus. *Turkish Weekly*, [online] 3 April. Available at: <http://www.turkishweekly.net/news/148551/turkish-minister-anatolia-only-feasible-gas-route-for-israel-greek-cyprus.html> [Accessed: 24 Apr 2013].

³⁸ Cyprus Mail (2013) Gas: assessing future scenarios. *Cyprus Mail*, [online] 28 February. Available at: <http://www.cyprus-mail.com/cyprus/gas-assessing-future-scenarios/20130228> [Accessed: 23 Apr 2013].

desperately needs will come much sooner. Furthermore, a potential agreement between Cyprus and Turkey would probably improve the relationship between the two countries. This means that Cyprus would not only achieve a successful solution to the on-going Cyprus problem but also a reduction of its political and security risk in order to attract foreign investments and develop its natural gas field.

However, since a part of the Cypriot gas capacity is going to continue onwards to EU gas markets, this project is possible to face significant challenges. Specifically, if Cyprus locks its natural gas volumes in Turkey where Russia has the main control, since it is the biggest gas supplier in Turkey and also targets the EU gas market, Cyprus could probably face difficult and undesirable situations. Also, Cyprus would not have any opportunity to diversify its supply to other gas markets with probably more favourable prospective than Europe. Hence, Cyprus would not have the opportunity to penetrate still further in the gas market of Europe since Russia would control the Cypriot gas supply but nor would it be able to increase its range of gas markets.

Moreover, the commitment of Cyprus to a nation that has proven untrustworthy, who doesn't recognise the Republic of Cyprus as a legal entity and whose armed forces have occupied approximately one-third of the island in northern Cyprus since 1974, seems a very uncertain and risky option. Furthermore, the Cypriot people would never accept a long-term dependency on Turkey. It is interesting to note that in December 2011, following a statement by the president of the TRNC Dervis Eroglu, that Cyprus had committed for the construction of a Cyprus-Turkey gas pipeline, the Cypriot people immediately reacted by demanding the abdication of the then president.³⁹

4.3. Energy joint venture between Cyprus, Greece and Israel

The second strategic option of Cyprus to ultimately reach the natural gas markets in Europe is a joint pipeline with Greece and Israel. The subsea gas pipeline (around 1000km) would start from Cyprus to the Greek island of Crete, continuing onshore Crete and then from western Crete would continue subsea to the Peloponnese in Greece (Map 4).

³⁹ INEWS (2011) Παρασκήνιο για το φυσικό αέριο-Πρόταση Χριστόφια για μεταφορά του στην Ευρώπη μέσω Τουρκίας. INEWS, [online] 20 December. Available at: http://www.inews.com.cy/index.php?option=com_content&view=article&id=3399%3A2011-12-20-12-10-12&catid=116%3A2009-10-15-17-19-26&Itemid=246&lang=el [Accessed: 26 Apr 2013].



Map 4: Potential route of the proposed gas pipeline(Source DEPA)

The commercial rationale of this project is that Cypriot and Israeli gas volumes will flow westwards to large European markets such as Italy and Central Europe. This potential agreement could provide economies of scale in production of output and thus Cyprus could gain a competitive advantage against its competitors. Additionally, Cyprus may optimize its downstream supply chains and gain a better market share which it couldn't manage on its own. Moreover, Cyprus will benefit from the Israeli and Greek diplomatic and military security umbrella in order to support its drilling activities which are under on-going Turkish political and military threat and will also be able to enhance its weak geopolitical strategy against Turkey.

However, the viability of this project is questionable. Firstly, there are considerations about the technical complexity of the project, as the pipeline length and sea depth are significantly great. While the technical challenges could be overcome as Israel has significant technological capabilities, the huge amount of investment which would be required in order to create downstream infrastructures seems impossible since both Cyprus and Greece have financial problems.⁴⁰ Moreover, with this option Cyprus would not have any opportunity to diversify its supply to other gas markets with probably more favourable prospective than Europe. Furthermore, in contrast with Cyprus who has already announced its export strategic plans, Israel has not yet announced its export policy. This generates a question which can't be answered currently about the strategic fit of the potential partners.

⁴⁰ Statista.com (2013) *Greece - National debt 2013*. [online] Available at: <http://www.statista.com/statistics/167459/national-debt-of-greece/> [Accessed: 23 Apr 2013].

On the one hand, Greece and Cyprus who have similar cultures and similar managerial practises have collaborated successfully numerous times in the past as both countries trust each other. On the other hand, despite the good political relationships between Athens – Tel Aviv and Nicosia – Tel Aviv, the collaboration between them might have a lack of trust since there are many differences between the cultures and the managerial practises used. These differences, in combination with the Israeli preference of not communicating with openness about their strategic plans, generate many concerns about the efficiency of the synergy.

On the political level, the Cypriot analyst George Stavri, argued that if Cyprus tries to use this potential agreement as a tool of their foreign policy in order to either entrap or isolate Turkey, it is possible to backfire on Cyprus. Additionally, he has suggested that Turkey should be a partner in the strategic alliance rather than “an odd man out of this strategic alliance”.⁴¹ Hence, the only way for this energy triangle to succeed is to include Turkey as a partner; this seems to be impossible though has Cyprus does not trust Turkey and their relationship is completely unstable.

4.4. Energy joint venture between Cyprus and Israel

The objective of Cyprus here is to sign an agreement with Israel and probably with Delek Group and Noble Energy for the construction of an LNG facility which would connect the Israeli Tamar gas field to Cyprus.⁴² This potential joint venture between Cyprus and Israel has numerous commercial and political benefits for both countries.

On the commercial level, a potential agreement between Cyprus and Israel could provide economies of scale in production of output and thus Cyprus could probably develop its own resources to their maximum potential. In addition to this, Cyprus may achieve to optimize its downstream supply chains and gain a better market share in the gas market which it couldn't ever manage on its own. Moreover, combining together Cyprus will also provide economies of scale of inputs in the sense of reducing significantly the high capital investment which the construction of an LNG plant requires and Cyprus currently can't afford this on its own, since the island has many financial problems. Another advantage of LNG is that, unlike with the gas pipelines, it would give Cyprus the ability to diversify its markets so as not to depend on a single buyer and to export anywhere in the world. In addition to this, the demand of LNG across the world is increasing rapidly since LNG is not required significant natural gas

⁴¹ *Supra.*, note 4

⁴² Barkat, A. (2013) Cyprus wants Tamar gas. *Globes*, [online] 10 April. Available at: <http://www.globes.co.il/serveen/globes/docview.asp?did=1000835518&fid=1725> [Accessed: 22 Apr 2013].

pipeline infrastructure. Considering these and the agreement with the Korea Gas Corporation (Kogas), Cyprus might have the opportunity to target some new and more attractive export destinations such as Japan and China which are growing faster than the EU and whose gas prices are much higher than in the EU.⁴³

Since the LNG plant will be under the control of Cyprus, the challenges generated by the numerous differences between the organisation's cultures and managerial practises used, could be overcome. However, the assess contribution between the Israel and Cyprus is not equitably and accurately contributed since Israel's resource commitment is not in line with its control. This might lead to mistrust between Cyprus and Israel. On the political level, Cyprus will benefit from the Israeli diplomatic and military security umbrella in order to support its drilling activities which are under on-going Turkish political and military threat. On the other hand, Israel who has severe cultural problems and terrorism would secure its production by moving it to Cyprus.

However, the LNG plant presupposes that Cyprus will have the ability to attract long-term agreements. The existence of the Turkish political and military threat may influence and deter investors from a long-term commitment in Cyprus. It is interesting to note that the Turkish Ministry of Energy announced that they would suspend any current or future agreement with any private company with involvement or interest in the south part of Cyprus.⁴⁴ The first victim of Ankara's wrath was ENI whose operations across Turkey were suspended due to its refusal to halt resource exploration activities in the Republic of Cyprus' EEZ.⁴⁵ Moreover, in the short-term the LNG project seems more viable and profitable since the up-front investment required is much less; however in the long-term this might not be the case as the transportation cost would be extremely high. Once again, if Cyprus tries to isolate Turkey and perceives the potential synergy as a tool of its foreign policy it is possible that this will backfire with many dramatic consequences for Cyprus.

⁴³ Kate, W., Varró, L., Corbeau, A. (2013) *Developing a Natural Gas Trading Hub in Asia: Obstacles and Opportunities*. [report] International Energy Agency.

⁴⁴ Peker, E. (2011) Erdogan Threatens to Blacklist Companies Working With Cyprus on Oil, Gas. Bloomberg, [online] 22 September. Available at: <http://www.bloomberg.com/news/2011-09-22/erdogan-threatens-to-blacklist-companies-working-with-cyprus-on-oil-gas.html> [Accessed: 22 Apr 2013].

⁴⁵ Hurriyet (2013) Cyprus row axes Italy's Eni from Turkish deals. *Hurriyet Daily News*, [online] 27 March. Available at: <http://www.hurriyetdailynews.com/cyprus-row-axes-italys-eni-from-turkish-deals.aspx?pageID=238&nid=43736> [Accessed: 23 Apr 2013].

5. Conclusion

According to Solon Kassinis, the Vice President of the Cyprus National Hydrocarbons Company (KRETYK), the production of natural gas in Cyprus will commence in 2017/2018.⁴⁶ Since the domestic gas requirements in Cyprus are fairly small, Cyprus will export its gas to foreign markets - this is expected to start in 2019/2020.⁴⁷ Cyprus has announced that the main gas market to which it is willing to export its gas is Europe. Europe's willingness to diversify its gas supply and reduce its dependence from Russia seems to be a unique opportunity for Cyprus to achieve long-term agreements. However the hydrocarbon exportation has several issues and challenges which Cyprus needs to face by using the right strategy. The three main potential scenarios for its exportation strategy have been analysed above: to build a gas pipeline via Turkey; to build a joint pipeline with Greece and Israel which will pass through Greece; or to create a joint venture with Israel for an LNG plant construction in Cyprus.

While the option of building a gas pipeline via Turkey could give higher cost advantage and profits to Cyprus compared to the other strategic choices, the most attractive strategic choice out of the three is the creation of a joint venture with Israel in order to construct an LNG plant in Cyprus. However, Turkey, as the most powerful nation in the region and one of the world's fastest growing economies, would never accept being absent from any natural gas activity that takes place on Cyprus. Hence, any strategic choice presupposes a permanent and viable solution of the Cyprus problem and the stabilization of its relationship with Turkey. While the improvement of the relationship between Nicosia and Istanbul would give Cyprus the opportunity to reduce the political and security risk in order to attract more foreign investment, it might also open the route leading to the huge energy market of Turkey.

Unfortunately, Israel still voices its uncertainty about the LNG project in Cyprus and partly expresses its objections about any facility outside of Israel's territory due to concerns of strategic dependence on Cyprus. Nonetheless, this option can still be viable even without Israel since Noble Energy seems to promote the idea of an onshore LNG plant in Cyprus.⁴⁸ However, if Cyprus wants to gain a competitive advantage against its competitors it must

⁴⁶ Natural Gas Europe (2012) Cyprus Natural Gas Reserves Developments. *Natural Gas Europe*, [online] 22 November . Available at: <http://www.naturalgaseurope.com/cyprus-natural-gas-reserves-developments> [Accessed: 25 Apr 2013].

⁴⁷ Reuters (2012) Cyprus hopes gas export income will flow by 2019. *Reuters*, [online] 6 July. Available at: <http://in.reuters.com/article/2012/07/06/energy-cyprus-gas-idINL6E8I63R920120706> [Accessed: 25 Apr 2013].

⁴⁸ Financial Mirror (2013) Noble keen on Cyprus LNG plant. *Financial Mirror*, [online] 15 April. Available at: <http://www.financialmirror.com/news-details.php?nid=29506> [Accessed: 23 Apr 2013].

attract more foreign investors in order to achieve economy of scale. Since the relationship between Nicosia and Moscow was always good and both countries trust each other, Cyprus should try to attract Russian companies. By doing this Cyprus would be able not only to achieve an economy of scale but also to transform its main threat into its most powerful opportunity.

Finally, as Japan's nuclear energy production is currently stalled, its reliance on natural gas has increased dramatically, creating great export opportunities. A potential synergy of Cyprus with the Korea Gas Corporation (Kogas), which is one of the companies included in the consortium awarded for the exploration and exploitation rights for Blocks 2 and 3 in Cyprus EEZ and that has access to Japan and to other Asian markets, might open the door to the most promising and faster growing market of Asia (Japan and China), where the gas prices are also much higher than in the EU.

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