

Robert Uberman

**TRANSATLANTIC RELATIONS INTERNAL
TO INTERNATIONAL OIL COMPANIES
AS AN IMPORTANT COMPONENT
OF EUROPEAN ENERGY SECURITY**

The abundance of natural resources, in other words,
was itself an outgrowth of America's technological progress¹.

Introduction

It has been well established that intra-corporation economic ties play an important and growing role in the global economy. Simultaneously an importance of energy security has been examined thoroughly. However very few academics have undertaken researches related to interconnections of American and European operations of International Oil Companies and these relations' significant contribution to strengthen energy security. This article pretends to fill up this gap, while analysing dynamics of this relations in view of challenges faced by the oil sector at the beginning of XXI century. The chief importance amongst them are associated with:

- an accelerating expansion of so called National Oil Companies, which show growing ambitions in areas traditionally for the established counter partners (IOCs) like refining and drilling technology to name a few;

¹ E.B. Barbier, *Scarcity and Frontiers. How Economies Have Developed Through Natural Resource Exploitation*, Cambridge 2011.

- ambitions of Russian companies (Gazprom, Rosneft, Lukoil) to become a new leading forces on the global stage;
- narrowing access to attractive hydrocarbon resources;
- shale gas and shale oil revolution in the US.

A key hypotheses analysed set forth in the article demonstrates that:

- Europe gradually loses importance for leading International Oil Companies (IOCs);
- the above indicated phenomenon may pose a real threat to the European energy security.
- commencing negotiations between USA and EU on Transatlantic Trade and Investment Partnership (TTIP) represent an excellent opportunity to take measures aimed at offsetting the above indicated developments.

Transatlantic operations of International Oil Companies – historical perspective and trends

The history of transatlantic oil relations is as old as oil industry itself. The first oil shipment from USA to London occurred in 1861. The very first important investment of an US based IOC in Europe came in 1921 when ExxonMobil (then the Standard Oil of New Jersey Company) constructed it's first UK refinery in Fawley. It was actually the fourth big scale unit in Great Britain. In fact Exxon had been present there form 1888, the year of establishing the first office in London. As of 1938 this was the only non-British owned refinery out of 8 but represented near 40% of the total capacity. After the II World War others followed the suit, so in 1970 US bases OIC operated 6 big refineries with near half of the total British capacity². Simultaneously other European countries had been targeted with various downstream investments spanning from production units to pump stations. Another area of American investments was created by the BP discovery of North Sea oil-fields in 1970, basically bringing upstream operations back to Europe (Romanian and Ukrainian reservoirs, then the only significant producing oil assets in Europe remained closed for IOCs due to the communist legal regime).

The reverse trend also occurred with Europe based IOC investing in the USA. In 1912, the Royal Dutch/Shell Group opened its first American branches, in 1915 completed first continuous-process refinery and in 1921 discovered its first oilfield: Signal Hill entering the upstream business on the other side of Atlantic. The second British oil company – BP, came later but in late 60s made the biggest oil discovery in North America: Prudhoe Bay reservoir in Alaska. The French IOC – Total can be proud of being one of the first companies in US petrochemical industry through operations of American Petrofina started at 1956.

² DOE UK, *Government, Oil Refineries and Bulk Storage of Crude Oil Systems*, Ruislip 1995.

The above presented activities created a room for both tensions and cooperation between American and European Oil companies. The very first conflict finished with famous Achnacarry Agreement made in 1928 between Standard Oil of John Rockefeller and Royal Dutch Shell of Henry Deterding – in fact dividing global oil market among its signatories and starting a tradition of oil cartels³.

This dual system had continued, although new players were joining, to form a famous “Seven sisters” group, five of them originated from the US and two from United Kingdom (although one: Shell has been traditionally associated also with the Netherlands). Responding to ambitions demonstrated by other developed countries some researchers and practitioners added Total and Elf of France as well as ENI of Italy to this list. Surprisingly very few noticed achievements of the Japanese Nippon Oil which legitimately could have been affixed to this list, keeping it purely “transatlantic”, e.g. American and European. The “sisters” had interlocked in an extensive network of connections spanned from well-known foreign oil fields development projects (especially in the Persian Gulf) to various R&D activities. The “golden period” of their dominance falls between the end of II World War and outbreak of the first oil crisis in 1973. Scientific and popular literature is (over) loaded with papers analysing reasons of their dominance and decline⁴.

In consequence up to 90s of XX century the petroleum industry had been concentrated on both side of North Atlantic with dominance in refining and other downstream activities as well as with almost full exclusivity as far as research and development is concerned. Beyond Europe and North America one could find exploration and extraction activities as well as markets for generic oil products. Creation of an European economic zone, firstly under EEC and then under EU and relaxation of trade and investment barriers under GATT or mutual agreements on one side allowed for growing concentration of oil & gas companies in developed countries while relative backwardness kept companies from OPEC at bay. The peak of this dual dominance was reached, when a string of so called mergers of elephants created a group of 6 supermajors: 3 coming originally from US (ExxonMobil, Chevron, ConocoPhillips) and 3 from Europe (BP, Royal Dutch Shell, Total) but all landing with assets on both sides of Atlantic. Simultaneously, however, two other trends became clear and started to change a global picture of oil and gas industry⁵:

- National Oil Companies (NIOC) had gradually evolved from their previous role of guardians of oil reservoirs and revenues streams for their respective governments and expanded their activities towards downstream and R&D, some with notable successes, at least in certain areas. Unfortunately,

³ A. Sampson, *Siedem sióstr*, transl. J. Bielski, Warszawa 1981 [eng. ed.: *The Seven Sisters: The Great Oil Companies and the World They Shaped*, New York 1975].

⁴ D. Yergin, *The Prize. The Epic Quest For Oil, Money and Power*, New York 2009, p. 595–599.

⁵ S. Coll, *Private Empire: ExxonMobil and American Power*, London, 2012, p. 60–66; D. Yergin, *The Quest. Energy, Security, and the Remaking of the Modern World*, London 2011, p. 83–104.

with exception of Norwegian Statoil, the were neither European of origin nor their key units were operating in Europe.

- America shale gas revolution not only opened new resources of hydrocarbons for commercially viable extraction but strengthened once again US technological leadership both in the area of upstream and downstream. All three leading exploration equipment and technology companies: Schlumberger, Halliburton and Baker Hughes were and still are located in the USA. Moreover, falling energy prices in North America combined with some other factors shifted a competitiveness balance in downstream manufacturing back towards American plants⁶.

Both above mentioned developments appeared simultaneously with expansion of so called “emerging countries”, mostly located in Asia. Consequently all of them have led to weakening of Europe’s attractiveness for global oil & gas companies, as a place to locate their core assets and activities. It is noteworthy that after the fall of communism, when majority of multinational corporations rushed to Eastern Europe motivated by both opening market and competitive labour, Oil & Gas companies kept distant. With a notable exception of Shell and Conoco-Philips engagement in the Ceska Rafinerska and Shell’s and BP’s building petrol stations chains Oil Majors have not made any significant investment in this area. It was not caused by a different view on relative attractiveness of emerging Europe versus the old one. Here there has been no discrepancies. The real reason was the relative decline of Europe as a whole what discouraged ExxonMobil and alikes to invest even in the most attractive part of the continent.

Sustaining dominance of the American oil market and it’s consequences for transatlantic operations

Surprisingly for many scholars, at present we are experiencing another era of American dominance in the oil & gas industry. The combination of horizontal drilling and hydraulic fracturing has unlocked huge deposits of natural gas and oil known earlier but considered unfeasible to extract. The shale gas revolution has brought production of both shale gas and oil to unexpected high levels, and additional growth is expected to occur. The International Energy Agency now forecasts that the United States once again will become the world’s biggest oil producer (by 2020) and a net oil exporter (by 2030)⁷. Although the first projects had been carried out by independent companies swiftly supermajors came on board with the most spectacular investment of ExxonMobil which acquired the leading shale gas producer XTO in 2009 for 41 billion USD. But all others have obtained significant level

⁶ *Ibidem*, p. 329–332.

⁷ S. Lund *et al.*, *Game changers: Five Opportunities for US Growth and Renewal*, McKinsey Global Institute 2013, p. 22.

of exposure to this sector. To give one example: Shell's advocacy of natural gas in the energy mix led the Dutch corporation to invest over 25 billion USD in North American shale gas projects – 1/3 of the total capital expenditures for the period 2011–2013.

A sudden abundance of natural gas and, to less extend, oil, combined with certain infrastructure constrains, has fundamentally lowered prices of primary energy sources in inland USA. All energy-intensive downstream industries benefited significantly from this process with refineries and petrochemical plants among the biggest winners. And because technology needs some time to be effectively transferred and applied, North America may be able to sustain its shale gas and oil advantage over other countries for the next ten to 15 years⁸.

The shale gas revolution underlined once again importance of real long-term fundamentals of American leadership in oil & gas industry, lying beyond access to physically present natural resources:

- Technological expertise – it was the research and development as well as manufacturing capacities and existing energy infrastructure across America, which firstly created conditions for technology creation and commercialisation and then allowed to rapidly scale up successful efforts.
- Efficient capital markets, which financed early stage highly risky activities big companies consider too hazardous to promote.
- Long-standing U.S. commitment to the rule of law and secure contracts which gave investors in oil and gas development and innovation a guarantee that in case of success they will be allowed to obtain justified share of benefits.

It may come as a surprise that all breaking through innovations had been developed not only without direct governmental support but to some extent in contradiction to directions set in publically sponsored programs. On the contrary, programs sponsored by Department of Energy, like the one run Synfuels Corporations or the other, regarding Clinch River breeder reactor failed, burning taxpayers money without the effect. Eventually these efforts led to a conclusion that they “served to frustrate policymakers and research performers alike, and divorce some U.S. energy policies and technology investments from the realities of twenty-first-century global energy marketplace”⁹. It has always been a private sector to deliver breakthrough innovations shaping the industry and enhancing energy security. The above listed fundamentals of the US dominance have been present for all time in consideration and played in favour of this country much stronger than resources availability. American companies have been responsible of either discovery or full scale commercialisation of all important technologies pushing forward the oil and

⁸ S. Heck, M. Rogers, P. Carroll, *Resource Revolution: How to Capture the Biggest Business Opportunity in a Century*, Boston 2014.

⁹ J.H. Kalicki, D.L. Goldwyn, *Energy & Security. Towards a new foreign policy strategy*, Washington 2005, p. 426.

gas industry while financial markets have kept delivering necessary financial resources and the government secured necessary regulatory framework. Here three significant examples shall be mentioned. The first major pipeline was constructed in Pennsylvania in 1878 and the network quickly expanded financed via capital markets. Later, in 1906, the Hepburn Act was passed by Congress, introducing third party access concept to such transportation routes¹⁰. The first tanker sailed actually the Caspian Sea and was invention of one of Nobel brothers but swiftly Americans took the lead getting the scale up¹¹ while US government granted a protection needed for such investments security sometimes literally with guns and torpedoes. Also cracking which was patented in tsar's Russia in late XIX century and effectively got protection in 1913 in the US, and only Chevron soon after the II World War constructed the first big scale hydrocracking installation in Redmond, California closing a long term process enabling disconnecting structure of refinery products from properties of crude¹².

It is also worth noting that American policy regarding energy security based on the US leadership in oil and gas industry in view of strength of transatlantic interconnections has evidenced to be beneficial for Europe. It is a well known fact that during the II World War Churchill approached Roosevelt several times for emergency shipments of oil and refinery products, in some cases volumes in consideration exceeded 0,5 million metric tonnes¹³. Such operations were possible only due to already established commercial relations allowing logistically and financially for such operations. But it is relatively narrowly recognised that by protecting oil routes from Middle East the US in fact protects in bigger extend European than its own oil supply sources. In the case of former market Persian Gulf accounts for 17% total oil import while in the latter one for 21% (BP 2012). Since other European key source – Russia – supplies mostly Central Europe, if Western Europe alone is considered, the Middle East share would be even higher. There are various reasons for this policy but definitely securing network of business relations of oil & gas majors plays an important role amongst them¹⁴. Their weight for US energy security makes any scenario under which Europe falls into energy shortage or crises difficult to be accepted by the US governing elite. But if these relations become one sided then, in a natural way, American governing bodies will have to re-evaluate their approach.

¹⁰ V. Smil, *Oil*, London 2009, p. 137–138.

¹¹ S. LeVine, *The Oil and the Glory: The Pursuit of Empire and Fortune on the Caspian Sea*, New York 2007.

¹² V. Smil *op. cit.*, p. 148–149.

¹³ D. Yergin, *op. cit.*, p. 355–358.

¹⁴ A.J. Bacevich, *American Empire. The Realities & Consequences of U.S. Diplomacy*, Cambridge Ma 2002.

Diminishing role of IOCs' transatlantic interconnections as a threat to European energy security

Over hundred years of cooperation in oil and gas industry various levels of relations have been developed:

- Initially the physical flow served as fundament of the relations in consideration since at the beginning of XX century the import from US was a primary source for Western Europe. But even at present round 60 million ton of crude and even bigger volume refined products are traded across North Atlantic¹⁵.
- Later the physical flow was supplemented and then substituted by direct manufacturing and marketing operations of US oil and gas companies in Europe and vice versa. Still BP and Royal Dutch Shell count among top refiners in USA (occupying the fourth and seventh place respectively)¹⁶. On the other side ExxonMobil is the second biggest refiner in Europe.
- In the next phase R&D facilities were created in other than headquarters' continent drawing on intellectual base available both in US and Western Europe.
- Almost simultaneously to the above presented development oil & gas majors started to create networks of satellite companies in various activities related to technology development. One of the most significant examples of such cooperation is creation of Infineum in 1999 by ExxonMobil and Shell which swiftly became one of the leading additive producers in the world alongside with Lubrizol, Oronite (owned by Chevron) and Afton. Infineum business centres are located in the UK, USA and additionally, in Singapore.

But somewhere around 2000 this ascending trend slowed down significantly, with signal of contractions. These have been the following:

- Alongside a global shift for refinery products demand supermajors have significantly diminished their exposure to oil refining in Europe.
- With the US dominance in oil & gas related services both in upstream and downstream even European supermajors are more tempted to expand their R&D activities in North America.

Between 2007 and 2011 US based majors sold four big European refineries, resulting with the total withdrawal of Chevron. If ConocoPhillips realizes the publicly stated goal to divest its share in the Irish refinery this second supermajor will also close all European refinery operations leaving ExxonMobil to be the only one present in European oil processing. This has to be viewed alongside a huge divestiture program of Royal Dutch Shell, who sold five refineries and BP and Total selling two each in Europe while expanding their presence in the USA. Consequently all supermajors increased significantly North American share in their total capacities

¹⁵ D. Yergin, *op. cit.*, p. 40–47; BP, *BP Statistical Review of World Energy*.

¹⁶ W. McKenzie, *Outsourcing US Refining? The Case for a Strong Domestic Refining Industry*, Washington 2011, p. 18.

at the expense of European operations. This trend will continue especially as the new wave of Asian refineries come to the market.

As far as R & D is concerned even European supermajors shifted their focus to the U.S. Shell, in 2013, modernized and expanded the Houston Center, which became one of the largest industrial technology centres in the world and the largest of Shell's three technology hubs with more than 2,000 of scientists and engineers including six of the 11 Shell Chief Scientists who are internationally-recognized thought-leaders in a range of disciplines. It is also the global base for a number of specific technology focus areas across upstream and downstream where proficiency, deep knowledge and thought leadership are concentrated. This step definitely has downgraded the remaining two Shell's R&D centres: in Bangalore (India) and Amsterdam (Europe). Giving the rapid expansion in Asia it is possible that in the next round of rationalisation and increasing efficiency the European one will become the first target. BP who runs 7 key technology centres (3 in USA and UK each, 1 in Paderborn, Germany) may be forced to reduce the their number and move at least one to Asia. The American supremajors also tend to concentrate their technology development activities in the USA and Asia, marginalizing gradually their respective European centres.

As far as allies are concerned in upstream activities special relations had been for a long time established between supermajors and the triad of leading exploration technology companies already named in this article: Schlumberger, Halliburton and Baker Hughes. Even if, in May, 2014 Aker Solutions of Norway and Baker Hughes of USA agreed to form an alliance to develop technology for production solutions that will boost output, increase recovery rates and reduce costs for subsea fields, it was decided the alliance core team would be co-located and based not in Europe but in Houston¹⁷.

Also in the downstream technology two biggest alliances: Chevron-Lummus Gobal and ExxonMobil-UOP (Honeywell) key roles are given to American units.

A problem of innovation gap between USA and EU has been widely recognised and discussed. The negotiations between USA and EU on TTIP, which started in 2013, shall be used as a tool to transfer at least some of American solutions to foster efficient transfer of knowledge based activities related to oil and gas industry to Europe. The first area in consideration refers to regulation on chemicals themselves. As Europe implemented REACH program which is based on mandatory registration of all chemical substances introduced to EU market. In the US such obligation neither exists nor is foreseen. Therefore EU, in its negotiation position admits, that neither harmonisation nor mutual recognition are feasible and consequently limits the scope for further agreement to the four following areas:

- prioritise chemicals for assessment and agree on how best to test them,
- classify and label chemicals,

¹⁷ World Oil online, *Aker Solutions, Baker Hughes form subsea production alliance*, May, 7th, 2014, www.worldoil.com/Aker-Solutions-Baker-Hughes-form-subsea-production-alliance.html.

- identify and address new or emerging issues,
- share data and protect confidential business information more effectively.

Such approach, albeit understandable in view of costs and benefits of REACH implementation by EU carries a risk of fostering a gap in chemical research. An obligation to disclose composition of certain products effectively removes intellectual property protection. European approach: no compliance, no sales already proved to be ineffective because oil and chemical companies moved whole value chains to the US (although REACH was not the only reason, it created additional motivation to do so). Unfortunately the negotiation position is very vague about intellectual property issue and protection of classified business information¹⁸.

Even more general are recommendations regarding vehicles¹⁹ – the second area of primary interest for oil and gas companies. There is no mention about fuels and lubricants in the whole document – key products of the industry. Europe, which leads regulatory efforts in this area and posting real achievements²⁰ (some of them even giving the Old Continent a competitive edge) may become eventually too specific market requiring extraordinary solution and thus discouraging global companies from investing there.

The last chance to bring significant US operations back to Europe came with announcement of DOE about possible shale gas deposits in various European countries headed by France and Poland. But after initial wave of exploration projects, which created hopes especially in Central Europe almost totally dependent on Russian gas deliveries, supermajors one after other announced either cancellations or significant delays of their projects. Chevron Corporation (CVX) abandoned its plans to search for shale gas in Lithuania, citing the “fiscal, legislative and regulatory climate.” In Poland, Exxon Mobil Corp. (XOM), abandoned efforts to cultivate shale gas because of regulatory shortcomings and difficult geological conditions. Shale gas in the Ukraine has failed for local demand being insufficient to create a gas boom as well as for political instability and corruption that have scared off most foreign investors including Shell, ExxonMobil and Chevron. France banned fracking technology outright in 2011 preventing even commencement of commercial scale explorations.

Energy security is usually defined as an ability to assure sustainable sources of energy at commercial conditions at least not disadvantageous to ones available for competition. The gradual restraints of supermajors European activities primarily affects commercial terms²¹. Europe already experiences the highest level of oil based products prices worldwide, even with correction for excise taxes. The same refers to inland gas prices. This adds to other factors causing massive migration of manufacturing from Europe. But other consequences are less visible but they may affect even security of flow of materials. Till recently Europe and USA have en-

¹⁸ European Commission, *EU–US Transatlantic Trade And Investment Partnership. Regulatory issues. EU position on chemicals*, 2014.

¹⁹ *Ibidem*.

²⁰ For example in lubricants industry.

²¹ E. Cziomer, *Międzynarodowe bezpieczeństwo energetyczne w XXI wieku*, Kraków 2008.

joyed the most advanced and comprehensive logistics infrastructure allowing for elastic and economic movement of vast crude and processed oil volumes. It was supplemented by complex network of business and financial arrangements. All of that allowed the famous, already indicated, Roosevelt's pledges of "oil gifts" for Churchill to materialize with swift deliveries. 60 years later Barrack Obama announced a will to supply Europe with LNG to check Gazprom's strong position in European market and rebuff in advance possible use of "gas weapon". The problem is that, among other barriers:

- neither USA nor Europe operates harbours capable to service volume of LNG needed to make a difference,
- supermajors do not have access to supply channels capable to move volumes needed from the US sources to European customers.

Before the shale gas revolution the key trade route for LNG was from Qatar to the US while Europe had been supplied via pipelines from Russia, North Sea and some other directions while in some countries a local sources also had been contributing considerable volumes. Almost total disappearance of the US as a buyer (2011 purchases were below 3 billion cubic meters – bcm) freed large volumes for Asia and Europe. The biggest global single importer of LNG is Japan with 107 bcm, more than Europe (91 bcm) where three dominant importers are United Kingdom Spain (25 bcm) and France (14 bcm), basically the only European countries with full-scale LNG terminals. LNG accounted for 16% of the total international gas shipments in Europe (with the FSU countries) in 2011. This created an opportunity to strengthen customers – in European case mostly utilities – bargaining power in relations with Gazprom and Statoil, driving down the prices in western part of the continent.²²

Supermajors are constantly looking at opportunities coming from bringing LNG to Europe as part of their overall strategy. Between 2000 and 2010 they managed to increase their share in global liquefaction capacity from 17% to 24% and regasification capacity from 3 to 12% becoming a real player on this market²³. And capitalizing on their strong presence in Europe is tempting for them. The almost immediate clear option lays in converting already existing US LNG importing terminals into exporting ones. One obstacle is caused by the fact that US government is slow in granting relevant permits, facing contraction from energy intensive industries²⁴. But the other one comes from deficiencies in European gas infrastructure:

- limited number of LNG importing terminals, located in countries which anyway are the least exposed to Russian political pressure;

²² BP, *BP Statistical Review of World Energy; Paying the piper: Gazprom and European Gas Markets*, "The Economist", 4th of January 2014, p. 46–47.

²³ ENI, *World Oil and Gas Report*, 2011, p. 94–95.

²⁴ E. Crooks, *Shale Gas Export will Hurt US, Industry Lobby Says*, "Financial Times", March 26th 2013.

- continent's pipeline structure developed over many years by individual countries and focus mainly on landlocked sources of gas.

As of 2013 only 21 LNG terminals were operated in Europe with the total capacity of 190 bcm. The problem is that out of the ten biggest European terminals the top two are located in United Kingdom (Milford Haven/South Hook and Isle of Grain), five others in Spain and one in France, Netherlands (Rotterdam) and Belgium each. If planned/in construction units are taken into account the situation does not change much. The Polish Świnoujście terminal is the only one in Baltic Sea area and no other projects are run even if the whole Central Europe is analysed (however some intentions have been announced in Finland, Estonia, Romania, Latvia and Ukraine)²⁵.

The problem is that only one of the existing LNG terminals is run by supermajors: Isle of Grain, by ExxonMobil and Total (with participation of Qatar gas). At present IOCs invest in supplying Asia, from Middle East and Australia as the most promising trade route in the industry in consideration. Shell, the strongest advocate of natural gas role in global energy mix, pointed out that Europe lacks a clear position on LNG making 20-30 years investments impossible to carry out²⁶. Therefore, while such option cannot be ruled out, definitely it will take long time and significant effort to bring American gas to Europe.

The TTIP negotiations may become a useful tool to address supermajors' objections preventing them from expansion of LNG business in Europe. Analysing original EU position on energy and raw materials one can find important declarations²⁷:

- first of all it recognizes the fact that most trade agreements (like GATT) focus on import barriers almost neglecting the issue of export ones;
- secondly it recognizes a problem of third party access to infrastructure networks and hubs (like pipelines, LNG terminals) as an important area of harmonised regulations;
- it addresses also the of local content requirements or preferences which in theory cannot be applied against EU companies but this rule do not refer to US branches of supermajors which, as demonstrated already in the article are key technology suppliers,
- it aims at limiting governments' role in the price setting of energy goods on both the domestic market for industrial users and of energy goods destined for export purposes (dual pricing) in a way to limit the possibility for resource rich countries to distort the market and subsidize sales to industrial users,

²⁵ Gas Infrastructure Europe, www.gie.eu.com/index.php/maps-data/lng-investment-database [accessed May the 19th, 2014].

²⁶ S. Pfeifer, *Shell urges European Gas Vision*, "Financial Times", November 22nd 2012.

²⁷ European Commission, *EU-US Transatlantic Trade And Investment Partnership. Raw materials and energy. Initial position paper*, 2013.

- it recommends that the Third Party Access (TPA) should be mandatory, subject to regulatory control by an independent regulator bestowed with the legal powers and capacity to implement the rule in consideration,
- it aims at total ban of local content requirements;
- it recommends that all licencing processes in extractive industries must be transparent, what is to be achieved via incorporation of Extractive Industry Transparency Initiative (EITI) to TTIP as well as by granting equal access to such rights to US and EU companies (a sovereign right of respective countries regarding access to their natural resources is to be limited only to a fundamental decision whether given resource is to be open of commercialisation).

Successful negotiations and implementation of the above indicated measures ought to increase attractiveness of Europe as a place to develop gas related businesses of supermajors. However the question of time remains in place. Asia develops so fast, soaking vast part of their material and intellectual resources that even in case of TTIP is agreed and implemented certain business steps have already be executed, putting all the expected results in vain. Shall Europe's role in IOCs LNG value chains remain to be restricted only to a pure buyer of generic product, without their involvement in manufacturing, distribution, product development on the continent, it risks that supermajors will avoid our continent as a hub for significant developments within their gas arms. Giving an increasing role of the gas business for the analysed companies Europe heads further marginalization of it's role in their global operations.

Albeit arguments set forth above about diminishing role of Europe in IOCs activities one has to notice that our continent still weights on their sustainability and profitability. Europe still constitutes the most profitable market worldwide for downstream operations. For some supermajors it remains to be either a real hub (Total) or at least the leading geographical area for some businesses (PB, Shell, ExxonMobil). So nothing has been decided yet. But if the trend of converting Europe into position of junior partner within the framework of IOCs' transatlantic interconnections endures, it will, at certain point become irreversible harming European energy security.

Conclusions: coming UE-USA free trade agreement as an opportunity to reverse the trend and promote transatlantic operations of International Oil Companies

As it was indicated in p. 2 Europe still plays important role in IOCs strategy. Therefore they remain committed, in own interest, to contribute in various ways, to maintenance of European energy security. But a negative adverse trend in this respect could not remain unseen and unchecked. Especially the recent Ukrainian crises showed plainly how risky such approach may turn out.

Therefore European Union and individual governments should:

- a) recognize diminishing role of European activities of IOCs as a substantial threat to their energy security,
- b) take advantage of commencing negotiations on EU-USA treaty regarding creation of the commercial zone to create conditions for maintaining the present level if not increasing IOCs involvement in Europe,
- c) recognize a pivotal role of technology developments and innovation as a tool for securing energy sources as the US recent case proved,
- d) borrow on American achievements in the above mentioned area through encouraging development of R&D centres in Europe.

European governments need to view energy security issue in a more profound and complex way recognizing that beyond a physical access to resources their policy shall also consider an access to technological and managerial capabilities connected with Oil & Gas industry as a vital pillar of their policy. Since progress in these areas is mostly concentrated in the US and run either by American companies or American branches of corporations coming from other countries, Europe can achieve the above stated goal primary by strengthening ties between their own and American centres for R&D and headquarters. Such steps has already be undertaken by Norwegian government, which on 2004 already signed an agreement with the US on long-term cooperation in area of energy research and technology²⁸.

Successful outcome of TTIP talks represent an excellent opportunity to support the above indicated developments²⁹ because:

- harmonisation of regulatory framework regarding especially such areas like intellectual property, chemicals registration and compliance may at least partially level out the US advantage in innovation environment,
- coordination of climate related policy may encourage IOCs to reconsider their policy regarding allocation of manufacturing assets,
- creation of LNG infrastructure in Europe parallel to already existing oil one should encourage IOCs to invest in gas business and this way to check European dependence on Gazprom.

To achieve above mentioned objectives EU should:

- insist on total removal of dual pricing capabilities (eg. export barriers) for energy and fuels as well as local content rules;
- insist on implementation of equal third-party access rules to energy infrastructure components both in the US and EU;
- reconsider its position on chemicals, especially on REACH regulations;
- include intellectual property protection issue to much wider range of areas in negotiations.

²⁸ J.H. Kalicki, D.L. Goldwyn, *op. cit.*, p. 349.

²⁹ M. Kędzierski, *Umowa o wolnym handlu między UE a USA. Jakie korzyści dla Polski*, Warszawa 2013.

Poland, being rightfully proud of possessing the oldest oil industry in the World, gifted with abundant fossil fuels natural resources and exposed to severe energy security problems has a vital interest in contributing to the TTIP process in this area. ExxonMobil withdrawal from the shale gas exploration project should serve as an emergency ring in this process.

Partnerstwo transatlantyczne a międzynarodowe koncerny naftowe – element europejskiego bezpieczeństwa energetycznego

Artykuł prezentuje rozwój transatlantycznych powiązań globalnych korporacji naftowych – jako jednego z filarów północnoatlantyckiego systemu bezpieczeństwa. Pokazuje perspektywę historyczną ich działalności po obu stronach Atlantyku, ze szczególnym uwzględnieniem rozwoju wzajemnych powiązań w zakresie wydobycia i przetwarzania węglowodorów, a następnie badań i postępu technologicznego. Analizie zostały poddane ostatnio występujące zjawiska, wskazujące na znaczące przesunięcie układu sił na rzecz ośrodków amerykańskich. Uznając wpływ powszechnie znanych trendów, takich jak wzrost znaczenia narodowych korporacji naftowych krajów produkcyjnych oraz „rewolucji łupkowej” w Stanach Zjednoczonych, podkreślono istotne znaczenie amerykańskich sukcesów w rozwoju technologicznym i innowacjach jako głównych czynników sprawczych analizowanego zjawiska. Europa, jako jak niezdolna do dorównania drugiej stronie w zakresie potencjału w omawianych dziedzinach, ryzykuje utratę znaczenia w transatlantycznych relacjach. W konsekwencji osłabieniu ulegnie zarówno znaczenie starego kontynentu dla głównych uczestników globalnego rynku węglowodorów, jak i poziom jego bezpieczeństwa energetycznego. Rozpoczęte negocjacje w sprawie Transatlantycznego partnerstwa w dziedzinie handlu i inwestycji stwarzają Europie szansę na odwrócenie tego zagrożenia – jeśli wyrównane zostaną różnice w ochronie własności intelektualnej, finansowania innowacji oraz powstaną warunki do budowy wspólnej platformy infrastruktury paliwowej.

słowa kluczowe: bezpieczeństwo energetyczne, koncerny naftowe, partnerstwo USA–Unia Europejska