ROLE OF PRIVATE SECTOR IN BUILDING NATIONAL STRATEGIC RESERVES OF CRUDE OIL AND OIL PRODUCTS

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Table of contents

1. Strategic reserves of crude oil and oil products in the EU and the USA

Growing competition from the Baltic countries

Lithuania, Latvia and Estonia are intensively extending their capacity for storing crude oil and liquid fuels. Many fuel tanks are built on wharfs, and they increase the attractiveness of the Baltic ports from the commercial point of view, as well as the level of energy security of those countries (part of the raw material and fuels must be maintained by commercial companies).

Polish ports, and in particular Szczecin and Gdynia, the competitiveness of which has been decreasing, will lose their attractiveness for fuel companies in favour of the ports in Lithuania, Latvia and Estonia. Poland may lose its opportunity to become a key transit location for energy materials. The existing fuel installations should be used not only to satisfy Poland's requirement for energy. The State Treasury could indirectly or directly derive even higher profits from the transit of oil and oil products. The extension of storage capacity for liquid fuels and crude oil would be particularly beneficial for the further development of the Gdańsk Port which is deep enough to receive the largest tankers.

The growing competition in the energy material transit market from the Baltic countries is a threat not only for commercial reasons. European bilateral agreements on fuel reserve storage may soon be signed. Then, the producers and trading companies will not be obliged to store mandatory fuel reserves in the country in which they operate, but will be able to keep their fuel reserves in the neighbouring countries. The "migration" of strategic reserves abroad will then take place for two reasons – due to the absence of attractive locations for the reserves (i.e. close to reloading installations and pipelines) or due to lower costs of storage of oil products or crude oil.

Strategic fuel reserves in the European Union

The European Union countries are obliged to create and maintain 90-day oil and oil product reserves pursuant to Directives 68/414/EEC and 98/93/EC.

According to the latest generally available data, most of the "old" European countries meet the standards of the Directives mentioned above. Only Italy and Austria, based on the data for the last quarter, failed to meet them (and Austria fell only slightly behind). On the other hand, among the "new" European countries, only Slovenia and the Czech Republic created fuel and oil reserves for a minimum of 90 days.[1] Similarly as in other countries, Polish fuel reserves include:

- State reserves created by the Minister of Economy, and maintained by the Materials Reserve Agency,
- mandatory reserves created by oil and fuel producers and traders.

Individual EU countries apply various approaches to managing fuel reserves, but none of the systems excludes the private sector from storing reserves (even those purchased under the state budget). Indeed, large parts of fuel reserves are often stored in installations owned by private enterprises.

[1] ec.europa.eu/energy

France

In France, the SAGESS company (Société Anonyme de Gestion de Stocks de Sécurité) is responsible for creating and managing fuel reserves according to the guidelines issued by the CPSSP committee (Comité Professionnel des Stocks Stratégiques Pétroliers[2]). CPSSP is composed of thirteen members (nine of them are elected by various organisations uniting fuel companies, two members are independent, and two are recommended by the Ministry of Finance and Economy), the state controller and the commissary of the Energy Department at the Ministry of Economy (DIREM). The shareholders of SAGESS are almost all companies from the French fuel sector (the shareholders represent about 95% of the entire French market). SAGESS owns only one fuel storage facility (36,000 m^3 – 32,400 tonnes) – 99% of reserves are stored at trade partners' facilities. SAGESS uses almost 140 storage facilities belonging to about 50 different companies, most of which are shareholders of SAGESS, at whose facilities more or less 80% of reserves are held. The reserves are moved within the country on the basis of "swap" contracts between the parties.[3]

The Netherlands

The Dutch COVA agency (Centraal Orgaan Voorraadvorming Aardolieprodukten) is independent of producers and traders (there are no industry representatives in the agency management board), it operates as a foundation and its operations are not subject to taxation. The supervisory board is appointed by the Minister of Economy, and the Director of the Energy Department is its chairman. The foundation is managed by a two-member management board. COVA selects companies which take part in tenders for purchase, sale or supplementation of fuel reserves. At the moment, oil accounts for half of COVA's fuel reserves, and oil products – for the other half. Besides the reserves maintained by COVA, which are strongly controlled by the state, about 1/3 of all Dutch reserves is maintained by refineries[4].

Federal Republic of Germany

In Germany, the agency responsible for fuel reserves is the EBV company (Erdoelbevorratungsverband), the shareholders of which are more than 100 companies from the German fuel sector (all refineries and companies trading in oil and oil products). The nine-member supervisory board is composed of three representatives of the Federal Government, three representatives of refineries and three representatives of trading companies. The supervisory board elects a two-member company management board.

Unlike the Dutch COVA, EBV permits larger fuel companies to participate in contracts for storage and supplementation of reserves. These are usually long-term contracts – even up to 15 years.

In 2005, the federal fuel reserves amounted to ca. 13.4 million tonnes of crude oil and 11.8 million tonnes of oil products. EBV stores oil mainly in underground

[2] www.cpssp.fr
[3] www.sagess.fr
[4] Presentation of the Head of COVA – Henrik Jan Beverdam
www.iea.org/textbase/work/2002/zord/beverdam.pdf

tanks. The interesting thing is that less than half of the oil is stored in underground tanks belonging to EBV. The remaining underground storage facilities belong to third parties. Oil products are stored in ground tanks, partly abroad, in countries with which Germany has signed bilateral agreements on storage of strategic reserves (the Netherlands, Belgium, Italy and France). Some EU countries use the same solutions.

However, reserves were actually higher than the 25.2 million tonnes mentioned above because enterprises and refineries store oil and products for their own purposes[5]. Most of the crude oil reserves managed by EBV are stored near Wilhelmshaven due to the proximity of port reloading terminals and connection to the national pipeline system.

The United States

The United States have the largest reserves of oil in the world. In 2005 they amounted to more than 1 008 million barrels (about 144 million tonnes) – one third was stored by the private sector.[6] Two thirds of American reserves of crude oil constitute the so-called Strategic Petroleum Reserve. This reserve covers also oil stores located outside the territory of the United States, covered by foreign or commercial agreements on oil storage.

Even the American strategic reserve, which is purchased from the federal budget and stored in underground caverns created in salt caves, is managed by a private corporation, DynMcDermott Petroleum Operations Company, which was establish especially for the purpose of managing those resources.

DynMcDermott is a corporation benefiting from the synergy of four private companies which are its shareholders: DynCorp – purchased in 2003 by Computer Sciences Corporation (CSC); International Matex Tank and Terminals[7] (IMTT) from New Orleans, McDermott International and Jacobs Engineering. DynMcDermott manages and maintains stores of strategic reserves and their pipeline system on commission from the US Department of Energy.[8]

International corporations

A good example of operation of private companies in the sector of port fuel terminals and storage facilities at the international scale is a Dutch company, Royal Vopak (quoted on the Amsterdam Stock Exchange, 2005 income: EUR 683.6 million, net profit: EUR 93.2 million, 3,433 employees), which has 75 terminals in 30 countries, with the total capacity of 20 million m^3 (18 million tonnes)[9].

Most of the Vopak installations are managed by companies which are full subsidiaries of the corporation, but sometimes it establishes joint ventures for the construction of new terminals. For example, companies owning terminals in Spain (Terquimsa Barcelona, Terquimsa Tarragona) and Estonia (Pakterminal, Muurga port) are owned by the Dutch in 50% only. Similar joint ventures operate in China and Thailand.[10]

[5] http://www.verivox.de/News/ArticleDetails.asp?aid=10952
[6] www.eia.doe.gov
[7] Appendix No. 1
[8] www.spr.doe.gov
[9] www.vopak.com
[10] Appendix No. 1

Summary

The statutory provision on the obligatory creation of crude oil and fuel reserves by producers and traders would indicate that it is in the interest of the state to support the development of private fuel bases, if only due to the fact that they partly constitute state fuel reserves. That is why all over the world private companies are admitted to extending or developing new port terminals and fuel storage facilities in locations which are convenient for their development and maintenance.

2. Strategic reserves in Poland[11]

According to EU standards and the Polish Law on State Reserves and Mandatory Reserves of fuels (Journal of Laws No. 24/2003, item 197, Article 15), it is necessary to maintain reserves of fuels and/or oil for 90 days. The Materials Reserve Agency (ARM) is responsible for the supervision over fuel and oil reserves. The duty to store fuel reserves rests with the Agency, as well as with private fuel companies which are obliged to store part of their products or crude.

By 2008 Poland must fulfil EU requirements concerning fuel reserves. On 29 November 2006, the Council of Ministers adopted a new bill developed by the Ministry of Economy "*on oil, oil product and natural gas reserves, and on rules of conduct in the situations of threat to the state fuel security and with regard to fulfilment of international commitments in the case of disturbances in the oil market*". The Law will be the legal basis for meeting standards established by the International Energy Agency[12] (IEA) for the membership of which Poland is applying.

The level of reserves currently maintained by ARM under state economic reserves amounts to ca. 675,000 tonnes of oil and ca. 60,000 tonnes of finished products, and the annual costs related to maintaining the reserves amount to about PLN 60 million.

The estimated cost of creation of an additional amount of reserves will be ca. PLN 260 million[13]. The annual cost related to maintaining those additional state reserves in 2007 and subsequent years will be ca. PLN 15.5 million.

The change of the method of calculation of the internal consumption, introduced by the Law and consisting in changing the range of goods included in it will result in an increase in the base on which the mandatory reserve is calculated by ca. PLN 4.44 million. This amount has been calculated as a difference between the quantity acquired under imports of oil and oil products and the quantity of consumption of products mentioned in three product groups on which mandatory reserves are created at the moment.

For the oil sector, and in practice for producers and traders dealing with oil imports, this means an obligation to additionally create and maintain mandatory reserves of 980,000 tonnes of oil until 2007 and additional 40,000 tonnes until 2008. Costs related to the creation of this quantity of mandatory reserves are estimated at ca. PLN 1400 million in total until the end of 2008. Estimated annual costs related to maintaining that additional quantity of mandatory reserves of oil amount to ca. PLN 77 million a year.

The costs of building tanks for storing increased quantity of mandatory reserves, estimated at ca. PLN 770 million, should be added to the costs quoted above. The costs related to the construction of tanks will be divided among entrepreneurs building the tanks for the purpose of maintaining their own reserves and entrepreneurs providing storage services.[14]

From the point of view of the state – the more tanks, the better. Regardless of who built them and who would be their owner. It is enough for the state to require and enforce the creation of liquid fuel and oil reserves by the fuel companies. Part of the tanks built by the companies should be used to store strategic reserves of fuels and oil.

[11] Chapter written on the basis of documents of the Ministry of Economy – unless stated otherwise
[12] www.iea.org
[13] The cost estimation performed with an assumption that additional reserves resulting from the change in the method of calculating the average daily internal consumption will be created in the form of crude oil
[14] Regulation Impact Assessment – www.mgip.gov.pl

The effects of the fire in Możejki, and in particular the failure of the Możejki section of the "Druzhba" pipeline, showed that an energy crisis caused by external factors may also take place in Poland. The creation of larger strategic reserves of liquid fuels and crude oil is absolutely in the interest of the Polish state. The construction and management of tanks by private companies is beneficial for the state for financial reasons – encouraging private companies to build fuel terminals and storage facilities by enabling them to build those facilities in good locations (i.e. near the reloading and transit infrastructure) will transfer part of costs of creation of storage area from the State Treasury to private entrepreneurs. In exchange for the opportunity to build those tanks in those locations, those companies would have to use part of their tanks to store strategic reserves.

There is place in the areas surrounding reloading ports in Poland in which to build a sufficient number of tanks to increase strategic reserves to the level determined by the EU legislation. Land for storage facilities is available in Gdańsk, Gdynia and Szczecin – in Siarkoport, Naftobazy, Port Północny.

Those locations are particularly attractive for fuel companies because they are situated near industrial and reloading installations – which would enable those companies to use them for commercial purposes. State operators of terminals and pipelines would generate income from the transmission of crude oil and oil products.

The proximity of storage facilities and reloading installations is also beneficial from the point of view of the energy security of the state – in the case of a fuel crisis it will be possible to put strategic reserves into operation quickly, easily and at lower costs than if they were located in places with less developed reloading and transit infrastructure.

3. Barriers for creation of fuel reserves by the private sector

Private fuel companies (which do not have the State Treasury among their shareholders) encounter considerable difficulties in building the storage infrastructure in port areas near the existing fuel installations.

On the one hand, despite the considerable transparency of their activities and willingness to invest large amounts of money with mutual benefits for them and the State Treasury, private companies encounter significant distrust and lack of assistance form the government administration.

On the other hand, they meet with obstruction on the part of other companies who are owners of the land mentioned above and who are afraid of competition.

The negative effects of failing to admit companies without the State Treasury shareholding to building tanks near the existing fuel terminals may be as follows:

- Higher fuel prices (higher costs of transport resulting from less attractive location of tanks, i.e. further from the reloading and transmission infrastructure).
- Transfer of part of operations and investments abroad. New tanks/storage facilities will be established in border areas in the neighbouring countries (Germany, Slovakia), which will result in:
    - reduction of the quantities of fuels stored in Poland,
    - reduced proceeds of Polish regions from charges resulting from the operations of the companies in the particular area,
    - reduced revenues of state operators of fuel terminals and pipelines.

4. Summary

Based on the example of both the United States and individual states of the European Union it is obvious that in order to ensure energy security it is recommended to involve the private sector in the development of strategic reserves of liquid fuels (both crude oil and oil products). The storage of energy materials and products by private companies does not preclude the leading role of the state in this segment of the energy market but supplements it. A skilful stimulation of private companies to develop fuel bases will not be detrimental and may only improve the energy security of the state. A larger fuel base in Poland means automatically larger reserves of oil and fuels.

The Government (directly or through the intermediation of State Treasury companies owning the land) may grant building permits only to those companies which make part of their tanks (e.g. 30%) available for mandatory reserves, and which in advance guarantee the availability of tanks for a certain period (e.g. 20 years) as well as lease them out at a preferential price (fixed price plus inflation).

Another solution is leasing tanks built by state companies to private enterprises. This will provide the State Treasury companies with owner's control and, at the same time, will permit them to make profit on the leasing out of the installation, which in longer term will cover the costs of construction. Simultaneously, private companies will be obliged to hold fuel reserves in those tanks, which will increase the level of energy security of the state.

An alternative and complex solution would be to create a joint-stock company in which shares will be held by fuel market entities and the State Treasury (directly of via e.g. the Materials Reserve Agency), which would be responsible for the creation and management of strategic reserves (modelled on the French SAGESS or the German EBV). The State Treasury would have the decisive influence on the process and control of the investment, and at the same time it would shift the costs of investment to private investors.

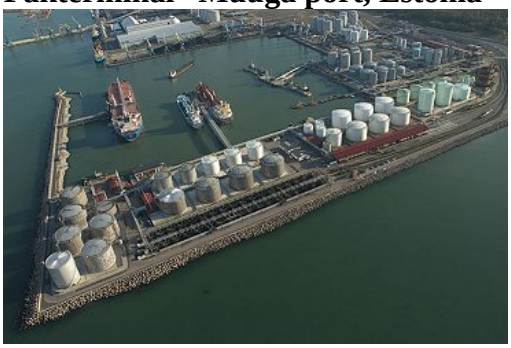
This overview has been developed by MDI Strategic Solutions, which cooperates with businesses from the energy sector. All the conclusions contained herein represent exclusively the views of MDI Strategic Solutions.

Appendix 1. Selected fuel terminals and tanks of private corporations[15]

Vopak Singapore – Sebarok Terminal – Singapore

79 tanks for oil products with capacity of 1,037,800 m^3 (934 020 tonnes) – planned extension by 216,000 m^3 (194 400 tonnes)

Pakterminal –Muuga port, Estonia



33 tanks with capacity of 305,200 m^3 (274 500 tonnes)

Vopak Terminal Europoort – Rotterdam, the Netherlands

84 tanks with capacity of 2,915,900 m^3 (2 624 310 tonnes)

Vopak Terminal Deer Park – Texas, USA

242 tanks for oil and petrochemicals with capacity of 1,115,100 m^3 (1 003 590 tonnes)

[15] www.vopak.com, www.imtt.com

International Matex Tank and Terminals – Quebec City, Canada

46 tanks with total capacity of 171,000 tonnes