

Explaining Compliance with International Energy Commitments: The G8 and the IEA

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Abstract

The common vulnerability shock, experienced by the three centers of power in the 1970s during the two energy crises coming one after another led to the creation of the coordination mechanism – informal club of leading industrial democracies effective of countering the problems the western powers faced. Energy issues being the centerpiece of the G7 countries deliberations and activities, although with the changing intensity over the 32 years of the G7/G8 existence, never were really absent from the club's agenda.

The G7/G8 being an effective instrument of global governance as a whole, managed to achieve considerable results in the sphere of energy security. The conducted research shows that due to the importance of energy issues for the sustainable economic development of the G7/G8 countries and the world economy as a whole, the compliance with the decisions taken in the sphere was quite satisfactory. This paper is aimed at making the retrospective analysis of the G7/G8 activities from the very start of its functioning to the present period, as well as trying to evaluate the prospects of the issue in the G8.

Introduction

Energy and issues related to it have been the focus of leading industrial countries' attention since the time of the G7 inception. Moreover, one of the main reasons for the start of the G7 was the energy crisis, with the economic one to follow.

Intensive energy consuming development of capitalist economies after the end of the World War Two led to a considerable growth of energy resources consumption. Thus, in the period from 1954 to 1974 the crude oil production grew more than 4 times, from nearly 700 mln tones to 2.9 bln tones, that is almost 8% a year. But crisis of the 1970s – recession of the world economy, politically and economically motivated reduction of oil extraction by OPEC members stipulated fluctuations of the extraction, that reached its peak of 3.2 bln tones in 1979 and its minimum of 2.8 bln tones in 1983.

In the middle of 1970s the leading western countries have recognized vulnerability of their economies and their dependency of the energy supply, the main flows of which were from the Middle Eastern region.

The formal reason of a crisis was Arab-Israeli war of 1973, that started with Egypt and Syria attack on Israel on the Jewish holiday of Yom Kippur. In 10 days after the war began Saudi Arabia initiated (partly due to insistence of the Egyptian leader Sadat) OPEC members to raise by 70 % crude oil price (from \$3 US to \$5 US per barrel). Iraqi oil minister even suggested that OPEC go further and nationalize American enterprises in Arab world, announce total embargo

on oil supply to the USA and other countries, friendly to Israel, and dispose of Arab assets from the American banks. This wasn't agreed to, but it was decided to reduce oil extraction by 5% and go on with the 5% reduction monthly till the political results were achieved. Some countries reduced extraction by 10%.

A week later, after President Nixon turned to Congress to ask for \$2.2 bln US to assist Israel, Arab oil-producing countries further reduced oil extraction and imposed an embargo on oil sale to the United States. Oil companies of all three centers of power have immediately raised prices. Two months later it was also decided to raise prices again by 128%, which led to the price exceeding \$11 US, with two thirds going to the exporting countries.¹ Oil embargo was lifted on March 18th 1974 and though was quite short, developed countries economies nevertheless suffered a serious blow.²

The second crises of 1979-1981 led to the oil price reaching \$37.29 US per barrel and thus further interest to alternative energy sources and energy saving model of economy.

These two shocks led to variety of actions on the part of the western industrialized nations. One of the steps taken was the establishment on November 15th 1974 of the International Energy Agency in Paris within the OECD framework. The same day saw Saudi Arabia, Qatar, and United Arab Emirates announce a slight reduction in posted prices and tax rates.³ Almost 5 months later 24 OECD members signed an agreement to establish a \$25 billion lending facility to provide assistance to industrial nations hurt by high oil prices.

From the very start there were differences of perception of the energy problem within the western block. France traditionally called for comprehensive international cooperation of all the countries (and felt it counterproductive to do the division between energy-exporting and importing countries. One of the attempts to introduce such an overall approach was the preliminary meeting on April 7-16 at Paris on world economic crisis between oil-exporting (Algeria, Saudi Arabia, Iran, Venezuela), oil-importing (European countries, U.S., Japan), and non-oil Third World countries (India, Brazil, Zaire). This attempt wasn't successful though, since talks collapsed after nations failed to decide whether agenda should focus on oil/energy issues or have a broader economic scope.

Other steps were taken by hard law international bodies. Thus on June 13th 1975 World Bank established its "Third Window," a fund to make loans to countries too rich to qualify for "soft" no-interest loans, but too distressed to afford loans at the prevailing normal lending rates. This action represented significant cooperation between oil-exporting and industrial nations.

¹ Income growth of oil exporting countries allowed for grandiose projects of construction to be launched. Although in the long run this policy failed. Political aims were not reached, OPEC lost a considerable part of its market, since Europe diversified its imports with the North Sea and Soviet Union supplies. The other outcome was the start of research towards introducing energy saving technologies in the West, which added to loosening net-importing countries dependency on OPEC.

² Interesting enough that though Arab oil ministers decided to end most restrictions on exports of oil to the United States on June 1-3, 1974, they nevertheless continued embargo against the Netherlands, Portugal, South Africa, and Rhodesia.

³ Along with cooperative actions western governments also undertook individual actions to counter energy crisis. During the crisis the US Energy Department financed the setup and trial of 3 thousand photoelectric solar energy converters. In December 1974 US Crude Oil Entitlements Program was enacted, retroactive to November 1974. The Japanese government have recommended its companies direct the research to use of energy saving technologies. The state initiated and financed big scale projects of elaborating technologies of the alternative energy sources use – Sunshine project, and also technologies of preserving such energy – Moonlight project. These effective measures within less then 15 years led to Japan being the leader in Hi-Tech market (http://bonline.ru/articles/a_6576.shtml).

The other step was the establishment in 1975 of the informal mechanism of cooperation of six leading industrial countries (with Canada joining the Group a year later) – the G7.

Energy Issues in the G7/G8 since its inception

One can provisionally single out four phases in the G7/G8 energy activities. During the times of the two energy crises – 1970s-early 1980s energy security issues took a prominent place on the G7 agenda. Further on during the period of much lower prices and sustainable excess of supply over demand this issue became second rate and was mentioned only within the environmental context. End of 1980s-early 1990s, after the demise of the Soviet Union and the socialist block falling apart the main focus of the G7 leaders was shifted to the problems of nuclear security (not only as an environmental issue, especially after Chernobyl AES accident of 1986, but also in the light of growing risks of proliferation of nuclear materials and technologies. And after 2000 energy security in its own right recaptures the attention of the G8 countries.

The G7 as Rapid Reaction Force (1975-early 1980s)

The G7 Rambouillet Declaration of 1975 can be with certain reservations called a kind of Charter of the club, where there were outlined the main reasons for its establishment with the range of issues to be in the agenda of the meetings.

Leaders have acknowledged that changes that occurred in the modern world led to appearance and strengthening of vulnerability. Thus, in order to achieve the aims, outlined in the Final Declaration, to promote further well being of the world economy, to acknowledge responsibility of governing an open, democratic society, dedicated to individual liberty and social advancement, it was decided to *“play their own full part and strengthen their efforts for closer international cooperation and constructive dialogue among all countries, transcending differences in stages of economic development, degrees of resource endowment and political and social systems”*.⁴ It was declared that leading industrial democracies are determined to *“overcome high unemployment, continuing inflation and serious energy problems”* and should concentrate their efforts among others on issues of extraction of *“raw materials, including energy”*. Since *“world economic growth is clearly linked to the increasing availability of energy sources”*, leaders have come forward with the decision to undertake actions in order to secure for their economies *“the energy sources needed for their growth”*. It was also noted that their common interests require that they *“continue to cooperate in order to reduce their dependence on imported energy through conservation and the development of alternative sources”*. Through these measures but also through cooperation between producers and consumer countries, responding to the long-term interest of both parties, leaders agreed to use *“spare no effort in order to ensure more balanced conditions and a harmonious and steady development in the world energy market”*.⁵

The next Summit of 1976 in San-Juan (Puerto-Rico) didn't contain much on energy, only stating that leaders will continue their efforts to develop, conserve and use rationally different energy resources, as well as assist developing countries in this sphere.⁶

⁴ Declaration of Rambouillet, 1975.

⁵ Declaration of Rambouillet, 1975.

⁶ Although there was a one-country decision in the sphere, taken by President Ford on December 22nd 1975 to enact the Energy Policy and Conservation Act (EPCA) effective February 1976, which authorized the establishment of the Strategic Petroleum Reserve (SPR), participation in International Energy Program, and oil price regulation.

But London Summit of 1977 saw a much wider and detailed consideration for this issue, it was mentioned not only in the Final Communique, but also in the Appendix to the Declaration of the Summit of Downing Street. It put further stress on conservation and diversification of energy production in order to reduce western countries' dependency from oil. In particular, with the decision to launch the appropriate research, it was agreed to increase the share of nuclear power, with parallel commitments to reduce the risks of nuclear proliferation.⁷

Further in the Appendix on World Economic Prospects leaders noted that during the next several years oil-importing countries will have a considerable payment balance deficit and to cover those will have to import capital from the OPEC countries (with the 1977 fiscal year facing the provisional deficit up to \$45 bln).⁸

Leaders also came to conclusion that in order to reduce demand for energy resources, increase and diversify its supply inside and outside the G7 countries it is vital to intensify the technology exchanges and joint research of ways of more efficient use of energy resources, better recovery and use of coal and other traditional resources as well as development of new sources of energy.

Once again the importance of developing nuclear energy was stressed with further accent on the problem of production and proliferation of dual-use materials and wider access and use of nuclear energy only for peaceful purposes. The G7 leaders pointed out that for the policy to be effective it is necessary to adopt the non-proliferation rules by both, developed and developing countries. Another point was the support to the already launched World Bank programs (Third Window) and further development of such programs along with the increase of its own resources. That was also the document where it was announced of the necessity of constant stock of energy resources for the current moment as well as for the future with fair prices in accordance with sustainable non-inflationary economic growth.⁹

It was also announced of the creation of International Fund for Agricultural Development, based on the principle of joint efforts of developed, OPEC and other developing countries.¹⁰

On a national level 1977 was significant since the U.S. Department of Energy (DOE) was created and consolidated many energy-related functions of the Federal Government into a single, Cabinet-level organization. Primarily, the Department of Energy merged the energy-related functions of several Federal agencies.

At the next 1978 Summit in Bonn energy issues were already part of the text of the Final Communique. Already in the Introduction leaders agreed with "*a comprehensive strategy covering growth, employment and inflation, international monetary policy, energy, trade and other issues of particular interest to developing countries*".¹¹ Paragraphs 4 through 16 were devoted exclusively to energy issues, since with certain improvement nevertheless existing situation in energy field in the world remained unsatisfactory. Specific danger was posed by worsening political situation in Iran, additional difficulties were brought by the oil pipeline fire in October, thus dropping Iraqi oil production considerably etc. Further in the document there were outlined specific actions taken in the sphere by all the G7 participants.

For example by then the EC has agreed in Bremen to reach the following goals by 1985, that is *«to reduce the Community's dependence on imported energy to fifty percent, to limit net oil*

⁷ London Communique, 1977.

⁸ Appendix. World Economic Prospects. 1977.

⁹ Appendix. Energy, 1977.

¹⁰ Appendix. North-South Relations, 1977.

¹¹ Bonn Communiqué, 1978. <http://www.g8.utoronto.ca/summit/1978bonn/communique/introduction.html>

imports, and to reduce to 0.8 the ratio between the rate of increase in energy consumption and the rate of increase in gross domestic product».

Taking into account the US responsibility in the energy field, the latter agreed to reduce its dependence on imported oil with the adoption by the end of the year of a comprehensive policy framework. To achieve oil import savings of approximately 2.5 million barrels per day by 1985 the USA promised to:

- *establish a strategic oil reserve of 1 billion barrels;*
- *increase coal production by two-thirds;*
- *maintain the ratio between growth in gross national product and growth in energy demand at or below 0.8;*
- *make its oil consumption grow more slowly than energy consumption.*

Thus the volume of oil imported in 1978 and 1979 was supposed to be less than that imported in 1977. In order to discourage excessive consumption of oil and to encourage the movement toward coal, the U.S. remained determined that the prices paid for oil in the U.S. shall be raised to the world level by the end of 1980.¹² Also January 1979 saw the USA distribute first Crude Oil Buy-Sell Program allocations.¹³

In a long-term period the G7 countries agreed to review their national energy programs. Private and public investment were underlined as an effective instrument of more efficient energy use, thus leading to the economic growth.

On the nuclear energy front the US President and Canadian Prime-Minister expressed firm intention to stay reliable nuclear fuel suppliers within the framework of effective guarantees, providing for no disruptions in the enriched uranium supply. Further to London Summit initiative leaders agreed to continue the research of the nuclear fuel cycle problems.

For the first time the G7 leaders noted that within the energy development it is vital to pay specific attention to the environmental protection and population security provision. Most obvious reason for that was the March accident, when the Amoco Cadiz tanker ran aground off the coast of France, spilling 1.6 million barrels of crude oil, which was the largest crude spill to date.

The G7, behaving from the start as a kind of global governance mechanism and assuming coordination and other functions with regard not only to the western countries, but to the rest of the developing world (with socialist block at that point falling out of the global mosaic). The OECD and World Bank were vested with the responsibility to undertake specific actions.¹⁴

Next year marked a new oil crisis, with OPEC decisions of further raise in oil pricing and an important supplier – Iran – falling out of the scheme (following the Iranian Islamic revolution, and taking hostages in the US embassy on November 4th, which led to the Carter administration ordering to stop Iranian imports to US and afterwards Iran canceling all contracts with US oil companies).

These developments determined a harsher and specific text at the G7 Tokyo Summit 1979. Inflation, once subsiding, regained a momentum rate in most countries. Raising oil prices and its

¹² Bonn Communiqué, 1978. <http://www.g8.utoronto.ca/summit/1978bonn/communique/energy.html>

¹³ This program existed from 1974 to 1981 under petroleum price controls. According to it buyers had to be small or independent refiners, whereas sellers were limited to the 15 largest refiners.

¹⁴ Bonn Communiqué, 1978. <http://www.g8.utoronto.ca/summit/1978bonn/communique/energy.html>

shortages have reduced the room for manoeuvre in economic policy in all the G7 countries, and damaged not only the developed, but which is even worse, the developing countries.

To counter these developments the G7 countries undertook the following commitments :

- *The European Community has decided to restrict 1979 oil consumption to 500 million tons (10 million barrels a day) and to maintain Community oil imports between 1980 and 1985 at an annual level not higher than in 1978. The Community is monitoring this commitment and France, Germany, Italy and the United Kingdom have agreed to recommend to their Community partners that each member country's contribution to these annual levels be specified.*
- *Canada, Japan, and the U.S. will each achieve the adjusted import levels to which they are pledged in the International Energy Agency for 1979, will maintain their imports in 1980 at a level not higher than these 1979 levels, and will be monitoring this.*

Another commitment was to set the targets of maximum oil import in 1985:

- *European countries set the 1978 figure;*
- *Canada, whose oil production was supposed to decline dramatically by 1985, promised to reduce its annual average rate of growth of oil consumption to 1%, with the consequent reduction of oil imports by 50,000 barrels per day by 1985. Canada's targets for imports therefore were to come down to 0.6 million barrels per day;*
- *Japan were not to exceed the range between 6.3 and 6.9 million barrels a day, and to review this target periodically, doing their utmost to reduce oil imports through conservation, rationalization of use and intensive development of alternative energy sources in order to move toward lower figures;*
- *The United States were not to exceed the levels either of 1977 or the adjusted target for 1979, i.e., 8.5 million barrels per day.*

Leaders also decided that to review the progress there was a need to establish a high-level group of representatives of the G7 countries and of the EEC (European Economic Community) Commission, within the OECD. The above mentioned commitments were to be guided by the fair distribution of supply, taken into account different supply modes, efforts on oil import limitations, economic situation, amount of accessible oil, and energy saving potential of each country.

The G7 also called on taking steps to bring into the open the working of oil markets by means of creating “*register of international oil transactions*”. While there had to be seen the “*feasibility of requiring that at the time of unloading crude oil cargoes, documents be presented indicating the purchase price as certified by the producer country*”, along with more information “*on the profit situation of oil companies and on the use of the funds available*” to them.¹⁵ It was also decided to minimize and finally abolish administrative action that could put upward pressure on oil prices.¹⁶

Once again more was said on the desirability of increasing the use of coal and nuclear energy (with the key role given to International Atomic Energy Agency (IAEA)). In the context of further assistance to the developing countries in the energy sphere the G7 leaders called upon expansion of the World Bank Program on the use of hydrocarbon resources.

The key element of the energy discussion was recognition of the vital role of the new technologies to the world's long-term freedom from fuel crises with the necessity of large public

¹⁵ Tokyo Communique, 1979. <http://www.g8.utoronto.ca/summit/1979tokyo/communique.html>

¹⁶ Nevertheless national interests prevailed over the group ones even within the club. Interesting enough that in October 1979 Canada eliminated light crude oil exports to US refiners, except for those exports required by operational constraints of pipelines.

and private investment. It was decided to establish an International Energy Technology Group linked to the OECD, IEA and other appropriate international organizations to review actions taken or planned domestically by each of the G7 countries, and to report on the need and potential for international collaboration, including financing.¹⁷

The Venice Summit of 1980 saw the issue of pricing and energy supply take central place once again, with the other problems unsolvable without those being resolved. The biggest share of discontent was certainly directed to the OPEC countries, since the continuing price increases were not by any means determined by market mechanisms. Although OPEC was never a unified body, with dissent existing from the very start between the moderates and the «hawks». Thus, in December of 1980 the OPEC pricing structure collapsed when Saudis used \$32 per barrel marker, while others - \$36 per barrel benchmark. Instability in the Middle East, especially after Iraq on September 17th 1980 broke 1975 treaty with Iran and proclaimed sovereignty over Shatt al-Arab waterway and a lasting war between the two.

The Arab oil exporting countries decisions effected not only the G7 and other developed countries, but to a large extent practically deprived developing countries of the economic growth prospects.

The G7 countries believed that their primary task was to “*break the existing link between economic growth and consumption of oil*” within a decade, with a maximum “*reliance placed on the price mechanism*”, coordination between domestic and world oil prices, with possible supplement were needed by “*effective fiscal incentives and administrative measures*”.¹⁸

Energy saving targets in the G7 countries were to be achieved through the following steps:

- *no new baseload, oilfired generating capacity constructed, save in exceptional circumstances, and the conversion of oilfired capacity to other fuels accelerated;*
- *further efforts, including fiscal incentives where necessary, to accelerate the substitution of oil in industry ;*
- *oil saving investments in residential and commercial buildings, where necessary by financial incentives and by establishing insulation standards. Public sector was to set an example in this;*
- *introduction of increasingly fuel-efficient vehicles, accelerating the progress, where appropriate, by arrangements or standards for improved automobile fuel efficiency, by gasoline pricing and taxation decisions, by research and development, and by making public transport more attractive.*¹⁹

In order to achieve a goal of increasing supply and use of energy resources apart from oil during the next decade in the equivalent of 1520 MBD, the G7 leaders agreed to double coal production by the beginning of 1990s (vesting the International Coal Industry Advisory Board to prepare necessary recommendations). The International Nuclear Fuel Cycle Evaluation Group findings were noted by the G7 leaders as an important contribution to the nuclear energy issue, mostly in the sphere of “*increasing predictable supplies; the most effective utilization of uranium sources, including the development of advanced technologies; and the minimization of proliferation risks, including support of International Atomic Energy Agency (IAEA) safeguards*».

Strong support was shown for the International Energy Technology Group recommendations which would have allowed for the commercial introduction of new energy technologies within a short period of time. As far as the G7 countries were concerned, it was decided «*by mid1981 to*

¹⁷ Tokyo Communique, 1979. <http://www.g8.utoronto.ca/summit/1979tokyo/communique.html>

¹⁸ Venice Communique, 1980. <http://www.g8.utoronto.ca/summit/1980venice/communique/energy.html>

¹⁹ Venice Communique, 1980. <http://www.g8.utoronto.ca/summit/1980venice/communique/energy.html>

adopt a twophased approach; first, listing the numbers and types of commercial scale plants to be constructed in each of our countries by the mid1980s, and, second, indicating quantitative projections for expanding production by 1990, 1995 and 2000, as a basis for future actions». On the international level the G7 leaders agreed to create an international team of interested nations on specific projects (with progress to be reviewed by high level representative on a regular basis).

Further on leaders expressed hope of the set steps to lead to the oil share in the overall energy balance decrease from 53% to around 40% by 1990.

What was new, that the G7 leaders announced their responsibility for the fate of the developing countries together with the exporting countries and socialist block.²⁰ Another problem for the Third World countries in particular was that of by large oilgenerated payments imbalances. The primary mechanism for adjustments was seen to be the international capital market. The G7 leaders also supported the «work in progress by their monetary authorities and the Bank for International Settlements designed to improve the supervision and security of the international banking system», with possible useful input by private banks.²¹

The G7 Ottawa (Montebello) Summit of 1981 didn't constitute a breakthrough in energy sphere. Part of the G7 leaders discussion devoted to the developing countries' problems within the context of energy issues wasn't differing from the previously adopted decisions and calls. It was reiterated that as part of a short term measures primary task laid with keeping adequate levels of oil reserves. Practical steps on renewables (solar, geothermal energy, biomass) were to be discussed at the forthcoming UN Conference on New and Renewable Sources of Energy.²²

Low profile of energy issues discussion can be rooted partly to the fact that oil prices started to fall and the peak of the crisis was already passed. In 1981 Saudis flooded the market with inexpensive oil, forcing unprecedented price cuts by OPEC members. In October, all 13 OPEC members align on a compromise \$32 per barrel benchmark. Later, benchmark price was maintained, but differentials were adjusted.

At that point the common perception of the energy security notion was deriving of the conclusion that markets are ineffective and react too fast to the price fluctuations and supply disruptions. Many believed that state should interfere with the market mechanisms and protect the consumer. The key energy security criteria within the G7 in 1970-80s included the following:

- maximum use of its own energy resources;
- energy efficiency increase by ways of taxation and legislation, helping to reduce energy consumption;
- diversification of energy balance with aim to lower oil share;
- minimum oil import, especially from the Middle East.

Besides a number of large scale long-term financial obligations were provided for:

- investment into creation of surplus capacities of energy infrastructure in case of supply disruptions;
- subsidizing of import supplies freight cost from a number of countries;
- policy aimed at increasing the share of renewable energy sources;

²⁰ Communiqué. Section devoted to Relations with developing countries. Venice Summit. 1980.
<http://www.g8.utoronto.ca/summit/1980venice/communique/developpe.html>

²¹ Communiqué. Section devoted to monetary problems. Venice Summit. 1980.
<http://www.g8.utoronto.ca/summit/1980venice/communique/monetary.html>

²² Communiqué. Montebello Summit. 1981.
<http://www.g8.utoronto.ca/summit/1981ottawa/communique/energy.html>

- increase of import duties on oil and its products with the aim to strengthen the competitiveness of renewable energy sources;
- forcing private and public companies to buy oil in accordance with intergovernmental agreements without considering economic practicality or quality parameters;
- administrative regulation of energy sectors by the national authorities;
- establishment of oil funds as a basis for price stabilization programs to mitigate consequences of dramatic oil price fluctuations.

The main lesson of the stage of the G7 activities, characteristic of overregulation and governmental intervention into the functioning of energy sector was the discovery that energy security can be achieved only within the framework of effective market mechanisms functioning within and outside the G7 countries.

Problem solved? (1980s)

Oil markets liberalization, drop in prices in the middle of 1980s, reduction in oil demand contributed to the world economy recovery. Moreover, the growth rates of oil extraction outside OPEC countries were exceeding previously made forecasts.

High oil prices led to changes in the energy sector with new technologies of heat insulation of the buildings, increasing energy efficiency at the enterprises, reduction in fuel use by automobiles. All this led to price slide.

During the 1982-1985 OPEC countries tried to stabilize prices, establishing low oil production quotas. In 1983 OPEC agreed to limit overall output to 17.5 MMB/D, with individual output quotas and cut prices by \$5 to \$29 per barrel. A year later OPEC cut production to 16 MMB/D, but agreement was negated by cheating and price-discounting (several OPEC members continued to extract more, than provided by the quotas). In June 1985 OPEC output fell to 20-year low of 13.7 MMB/D, but it leads to further loss of customers in favor of cheaper North Sea oil. By mid-1986 crude oil prices went down by 50 % - below \$10 US per barrel. The long lasting OPEC negotiations finally come to progress when on December 19th 1986 oil exporting countries reached an accord that would cut production by seven percent for the first six months of 1987 (from 17 MMB/D to 16 MMB/D) and would raise prices immediately toward a target world oil price of \$18 per barrel. Nevertheless this decision failed by January 1987 and oil prices kept low.

What added to the gloomy situation for the Arab countries was the start on March of the 1984 of "tanker war." Over the next nine months, 44 ships, including Iranian, Iraqi, Saudi Arabian and Kuwaiti tankers, were attacked by Iraqi or Iranian warplanes or damaged by mines.

The crude oil price went up for a short time in 1990, influenced by Iraq invading Kuwait, but after the Persian Gulf war its price was going stably down, until in 1994 it reached the lowest level since 1973.

By early 1990s the actual oil prices returned to pre-crisis levels, and with the oil demand resuming it got clear, that a number of energy security elements, that were considered to be key previously, to a great extent lost their relevance.

Issue of dependency from oil import for a long time was practically practically absent from the G7 agenda, which concentrated more and more on environmental protection, and from the second half of 1980s – on nuclear reactors security.

Apart from further oil price reduction, which determined a rather minor role of energy problems if compared to other issues, discussed by the leaders. Early 1980s became the turning point in the G7 life since it acquired a more political, rather than originally planned economic character. This was determined by a change of power in most of the G7 countries. The new conservative leaders of the USA, Great Britain, Germany, and Japan made bigger accent on military and political cooperation inside the western block and the same kind of confrontation with the socialist block.²³ It was the early 1980s when the Cold War has recaptured its dynamics, when the American President Ronald Reagan announced of the Strategic Defense Initiative Program (“Star Wars”). The same time, since the Summit in Ottawa (Montebello) in 1981 the problem of East-West relations took its permanent place on the agenda. In June 1982 in Versailles the G7 announce that it was possible to limit credit lines to socialist countries.

Energy problems at the first summit of the second cycle got only a small paragraph, briefly enlisting all the issues touched upon by the G7 previously. The only paragraph devoted to the developing countries stated the need for «special temporary arrangements to overcome funding problems for IDA [International Development Association] VI, and for an early start to consideration of IDA VII», with special emphasis on increase of «food and energy production in developing countries which have to import these essentials, and to programs to address the implications of population growth».²⁴

During the same Summit the USA also failed to talk its European partners into rejecting the deal to start construction of the «Friendship» (“Druzhba”) pipeline, as a result of which there was a start of mass supply of Soviet natural gas to Europe.

Next G7 Williamsburg Summit of 1983 was famous for different reasons – for the first time ever in the history of the G7 forum a Political Declaration was adopted on the security issues, where its participants acknowledged that security of their countries is indivisible and should be maintained on a global basis (with support for the American cruise missiles and Pershing-2 missiles in Western Europe in response to the Soviet SS-20), integrating the Nakasone government to the common western security strategy.

The only passage that came out of energy discussion was agreement that oil price reduction shouldn't lead to stopping energy saving efforts, development of alternative sources of energy, and improving understanding between the oil-exporting and oil-importing countries.

Energy component of the London Summit was very short and not substantive, only repeating previous decisions, with the only exception of the G7 leaders decision to activate the Common Fund for Commodities.²⁵ There was also some concern over the stability of international oil supply in connection with Iran-Iraq war. The G7 Chair Statement read that the world oil market remained relatively stable, and that the international system had «both the will and the capacity to cope with any foreseeable problems through the continuation of the prudent and realistic approach», which existed already.²⁶ The Bonn Summit of 1985 had nothing whatsoever on energy.

²³ Accordingly the US President – R. Reagan, the British Prime-Minister – M. Thatcher, the German Chancellor – H.Kohl, the Japanese Prime-Minister – Y.Nakasone.

²⁴ Communique, Versailles Summit, 1982. <http://www.g8.utoronto.ca/summit/1982versailles/communique.html>

²⁵ Economic Communique. London Summit, 1984.

<http://www.g8.utoronto.ca/summit/1984london/communique.html>

²⁶ Statement by the Chair. The Iran-Iraq Conflict. London Summit, 1984.
<http://www.g8.utoronto.ca/summit/1984london/iraq.html>

Further oil price reduction in first place allowed the industrial countries to boost non-inflationary growth and increase the international trade volumes. This time among the primary concerns of the G7 leaders were economic difficulties encountered by oil-exporting countries, to mention just a few – high unemployment rate, serious internal and external imbalances, uncertainty in future behavior of exchange rates, constant protectionist regime, continuing difficulties of many developing countries, and uncertainty of the energy resources price level in mid-term period.

Since oil price reduction was reached among other reasons due to coordinated G7 policies, leaders called on continuation of the course for long-term stability of energy markets and security of supply. It was also noted that existing situation on oil market allows for those who want it to augment oil stocks levels.

April 26th of 1986 marked tragic events at Chernobyl Atomic Station. Since this accident had catastrophic consequences not only for the Soviet Union itself, but had trans-boundary effects, the G7 couldn't set it aside. A separate G7 Statement on the Implications of the Chernobyl Nuclear Accident. The G7, apart from expressing sympathy for those affected and showing readiness to provide for medical and technical assistance, criticized the USSR for not providing promptly detailed and complete information on nuclear accidents, especially those with potential trans-boundary consequences. Although the Soviet Union got positive assessment of its willingness to cooperate on the issue with the IAEA.²⁷ It is worth noting here, that Chernobyl accident still stay on the world community agenda, currently the main discussion is going within the framework of shield construction for the Atomic station (it was announced of its complete shut down), and also reevaluation of real consequences and effects on environment and population.

Environmental security (late 1980s-1990s)

Second half of the 1980s energy security at the G7 forums are viewed through the prism of environmental security. Considerable parts of the documents at the Venice Summit of 1987, Paris Summit of 1989, and Houston Summit of 1990 were devoted to strengthening international cooperation in the sphere of secure nuclear energy use.²⁸ At the G7 London Summit of 1991 leaders announced their support to the EC initiative on creation of the European Energy Charter²⁹ (EEC), proposed by the former Prime-Minister of Netherlands R.Lubbers during the European Council session in Dublin on June 25th 1990. The full-blown participation in the EEC was considered vital in order to promote free and unhampered energy resources trade, strengthen the security of supply, ensure environmental protection and further economic reforms in Central and Eastern Europe as well as in the Soviet Union, in the first place by means of establishing open non-discriminatory regime of commercial investments in energy sphere.³⁰

From the very start energy problems were closely intertwined with the economic and political issues. At the G7 Venice Summit of 1987 the issue of oil supply was considered through the prism of providing for military security. The continuing Persian Gulf war and the Iranian ayatollah Khomeini threat to block strategically important Strait of Ormuz, the G7 delivered a serious warning to the warring parties on the inadmissibility of such actions (although the USA

²⁷ G7 Statement on the Implications of the Chernobyl Nuclear Accident. Tokyo Summit, 1986.

<http://www.g8.utoronto.ca/summit/1986tokyo/chernobyl.html>

²⁸ As for the Houston meeting, due to traditionally high Washington attention to security issues, apart from environmental aspect, a considerable place was taken by the nuclear non-proliferation.

²⁹ In 1994 countries further to EEC signed the Energy Charter Treaty (at the moment it amounts to 51 countries), which further created the Energy Charter Conference. Out of the G8 countries the USA and Canada never signed the ECT and have an observer status in ECC.

³⁰ Soon after, on December 17th 1991 the EEC was signed in the Hague by the majority of European States, the EC, Australia, Canada, Turkey, the USA and Japan.

have taken concrete actions to prevent such developments, the consolidated position of the rest of the G7 partners to a great extent strengthened these steps and demonstrated a unified western front).

The Paris Summit of 1989 saw the G7 note importance of cooperation with the hard law organizations, namely with the International Maritime Organization, to improve measure to prevent oil spills. It is not incidental, that the G7 raised the issue of ocean pollution in 1989. It is known that even during the free of accident oil transportation, there occur spills during its stowage and off-loading, throwing off the wash-over and ballast water into the ocean, as well as so called bilge water. But it is not very rare for the huge spillovers during the tanker accidents (although they account for only 5-6% of total oil pollution). Thus on March 25th, 1989 Exxon tanker Valdez ran aground, spilling 11 million gallons of crude oil in the waters of Price William Sound. Oil prices reacted upward to news of the spill and to potential shortages on the west coast caused by refinery fires there. The oil company spent \$1.4 bln to eliminate the consequences of the accident, but even this didn't restore full ecologic balance of the region.

That was also the times when the G7 leaders still had consensus on the environmental implications of the greenhouse gases and necessity to strengthen energy saving measures with the steps to reduce GH emissions.³¹

As it was noted above the energy problem came to the forefront once again due to the one more political crisis – the Iraqi aggression against Kuwait. Immediately crude and product prices soared upward; exchange markets also reacted wildly; jet fuel prices rise to record spread over other products due to increase in defense demand. In late August, OPEC president failed to revive floundering attempts to organize a formal OPEC meeting to discuss crisis/production strategies. Informal meetings held in Vienna resulted in record price falls. Conflicting reports of promises to increase OPEC output to compensate for embargo of Iraq and Kuwait oil further compounded market uncertainties.

Strategic positioning of this small country, primarily due to its oil-reach capacities, played against S. Hussein, since this aggression provoked immediate response of the international coalition, led by the USA with the UN consent. One of the reasons for such a surprising world community consensus was the weakened role of the USSR and Gorbachev's desire to support his western colleagues to the maximum, for both political and ideological reasons of his "new thinking" and for the economic reason of maximizing possible economic aid of the western countries to the Soviet Union. The other reason was the truly illegitimate actions of Iraq itself.

The Persian Gulf crisis showed that oil supplies and prices were still vulnerable in the face of political crises, although could to a certain extent be contained by the effective market mechanisms, expansion of supply by several exporting countries and steps taken in coordination with the IAE, especially in the sphere of using oil reserves.

It is necessary to remind that the IEA system can be activated in case when the scarcity of supply to one or several member countries exceeds 7% from its usual consumption. During the 1990-1991 Gulf was the IEA have supplied to the world market out of its reserves big amounts of oil, and in coordination with other measures, IEA managed to satisfy the demand. Another action

³¹ Communiqué. Paragraph devoted to the environment. Houston Summit, 1990.
<http://www.g8.utoronto.ca/summit/1990houston/communique/environment.html>

was cooperation with Saudi Arabia. Nevertheless it is worth mentioning that the crisis didn't reach its peak, since the threshold of oil scarcity was not exceeded.³²

The overall positive outcome of the crisis was the improved relationship between hydrocarbon resources producers and consumers, which allowed for further promotion of information exchange, transparency and effective functioning of the market forces. Nevertheless, the war led to certain economic difficulties in a number of countries. Thus a Gulf Crisis Financial Co-ordination Group mobilized up to \$16 bln for direct aid to those, affected by the crisis.³³ Another positive development, supported by the G7 leaders was the creation of the Gulf Development Fund.

After the conclusion of the counter-Iraqi operation the world experienced the danger of oil weapons use – this time not through embargo, but through burning of oil-wells, which affected environment seriously.

With the demise of the Soviet Union focus of the G7 leaders shifted to the nuclear security issues. It was proclaimed that each country bears individual responsibility for its atomic stations security. The G7 Munich Summit of 1992 saw the leaders decide to create an additional multilateral mechanism to provide for and elaborate measures of operational and technical security, as well as strengthening regulative regimes, not yet existing in the bilateral programs. The atomic stations, that didn't answer to existing standards were deemed to be closed or if possible – modernized, with such tasks passed on to the IEA and World Bank.

A certain breakthrough could be considered a Moscow Summit on Nuclear Security held under co-presidency of the Russian President B. Yeltsin and French President J. Chirac in April of 1996 (with the regular G7+Russia Summit held later that year in Lyon). The Moscow Summit went beyond the narrow issue of nuclear security, with the regional issues being considered as well.³⁴ The eight leaders noted that security of civilian nuclear reactors is an unquestionable priority and there is a need for the so called “culture of efficient nuclear security” in each country with the nuclear facilities. One of the most serious steps in this direction was the adoption of Nuclear Security Convention with a call upon all states to sign it for the Convention to come into force by the end of 1996. At the Summit there was also a decision to convene a meeting of relevant experts, which happened in October in Paris (with primary focus on MOX-fuel).³⁵

Nuclear sphere, although a component of energy field, still holds independent place, even surpassing purely energetic problems, for it involves such issues as non-proliferation or reduction of weapons of mass destruction. Since then (1996), this problems (of nuclear security) was quite high on the agenda in various fora, but not so much the G8. Mostly cooperation occurred on the bilateral basis or within other international structures. We can mention here the American-Russian High level task force on nuclear security in Washington DC (created upon the initiative of the two Presidents: Putin and Bush in February in Bratislava) aimed at achieving reduction of stockpiles and guaranteeing secure storage of nuclear materials. The other program of cooperation on energy security on a bilateral basis is happening with the Asian component of

³² Although the Gulf war wasn't the only reason for reduction of oil supply on the market. In October 1991 the Soviet Union suspended petroleum product exports as its fuel shortages grew. NYMEX futures price for WTI climbed nearly \$2, ending at \$24 per barrel.

³³ Communiqué. Section devoted to the Middle East. London Summit, 1991.
<http://www.g8.utoronto.ca/summit/1991london/communique/index.html>

³⁴ One can point out several reasons for the special Summit be held in Russia: 10th anniversary of Chernobyl accident; extreme unpopularity of the Russian President Boris Yeltsin in the run up to national presidential elections and the desire of the G7 leaders to support their Russian colleague.

³⁵ Moscow Nuclear Safety and Security Summit Declaration. April 20, 1996.
<http://www.g8.utoronto.ca/summit/1996moscow/declaration.html>

the G8 – Japan. It was as early as 1992 when the Japanese government adopted a program on the questions of diagnostics of mechanical facilities of atomic stations which provides for training of the station personnel on several directions.

The biggest step taken by the G8 in this direction was the Global Partnership against the Spread of Weapons of Mass Destruction in Kananaskis in 2002. Among its priorities – elimination of chemical weapons, decommissioning of atomic submarines, handling fissile materials and managing former military scientists. To coordinate its activities Senior Officials Group was created to meet practically every month.

As noted before the turn of the century marked the return of the G7/G8 interest to more traditional energy issues, apart from the nuclear security ones. The first meeting of the G8 energy ministers occurred in Moscow on March 31st-April 1st, 1998 with the main focus on global problems of the development of world energy in the 21st century. It was acknowledged that the G8 countries traditionally are the key players on the international arena.³⁶ What assured its effectiveness was the consultative meeting of international business and academic circles on the world energy issues. By the way it was there, that the participants came up with ideas later on taken specific forms in the Joint Oil Data Initiative (JODI) on oil market transparency and increasing its competitiveness. Some other issues covered were the nuclear security, energy transportation and environmental protection.³⁷

It wasn't decided formally to hold such meetings in the future, but ministers agreed to continue dealing with such problems on a bilateral basis or within the framework of the existing international mechanism. The ministerial recommendations were approved at the G8 Summit in Birmingham.

The G8 leaders also noted the success of cooperation on pilot project of international thermonuclear experimental reactor construction (ITER), a promising trend of energy development. After diplomatic and political debates between Tokyo and Paris it was decided that ITER is to be built in Cadarache (France). The Japanese gave in only after getting guarantees that the first full-scale reactor would be in turn built in Japan.

The new as the well forgotten old (21st century)

The modern phase of the G8 activities in the energy security sphere started to be formed in 2000 which was to a great extent determined by dramatic change in price conjuncture on a world oil market and got its further development on the subsequent fora (Genoa, Kananaskis, Sea-Island, Gleneagles). These activities were accompanied by intensive contacts between the G8 countries on a bilateral basis.

One of the main achievements of the G8 Okinawa Summit of 2000 was the establishment of the Renewable Energy Task Force, with the invitation passed not only to the G8 countries, but to all the parties concerned. It comprised of the officials, private sector, NGOs. The Task Force was headed by former Shell President Sir Marc Moudi-Stuart. Among the other initiatives and agreements supported by the G8 were the 1992 Convention on Civil Liability for Oil Pollution Damage, the International Oil Pollution Compensation Convention. Leaders also hailed a

³⁶ The G8 bear 39% of world energy production, 48% of primary fuel resources consumption and a considerable share of international trade of energy resources.

³⁷ It was only 1998 that a 50-year moratorium on mining and oil exploration in the Antarctic came into force. A protocol for the protection of the Antarctic was adopted by twenty-six countries in 1991, but it could not be implemented until Japan's ratification cleared the way a month before its coming into effect. Antarctica contains 70 percent of the world's fresh water, and the moratorium attempts to preserve the world's least polluted continent.

successful conclusion of the regular review conference on NPT, called on the countries to start and conclude within five years the Fissile Material Cut-Off Treaty; touched upon START-II and possible conclusion of START III.³⁸

Nevertheless even in 2000 one couldn't call Russia a full-scale G8 member, with separate sessions still being held. If in some aspects this was justified, the discussion of the problems of world crude oil markets without one of the biggest producers of this hydrocarbon fuel was not clear. Within the context of recent events the G7 noted the need to strengthen "stability of oil markets in order to provide for sustainable growth and prosperity in both, oil producers and consumers".³⁹

The next G8 Summit in Genoa showed that countries came to having differences over the environmental issues. It became especially visible after the US decision to drop the Kyoto protocol. Not much was achieved on energy security issues. The Renewable Sources Task Force have presented its report to the G8, which had besides other recommendations proposals to change the structure of subsidizing energy projects in the Third world countries in favor of turning down support for traditional energy resources suppliers. This strategy could lead to the growth of the renewables share from 2% to 7% by 2003.⁴⁰

During the separate discussions of the G7 countries the issue of oil prices have been raised again. It was stated that "*high and volatile oil prices*" constitute danger for the world economy, especially for the most vulnerable developing countries. That is why there was noted a need (though not for the first time) to "*increase and diversify energy supply, energy efficiency build up, infrastructure development and stable oil markets*". At the same time the G7 noted importance of complete and permanent Chernobyl reactor closure on December 15th, 2000.⁴¹

The second energy ministerial took place in May, 2002 in Detroit with the Canadian and American ministers assuming the role of co-chairs. This meeting saw once again the issue of improving the system of information exchange, with furthering it for consideration at the 8th International Energy Forum in Osaka. Other points of concern included nuclear security issues, cooperation with the developing countries, elaboration and use of new technologies. This time there was a decision taken on further regular format, never realized though.

The Kananaskis Summit of 2002 became famous not only for fixing Russia's turn in presiding over the Group, but also for the Global Partnership Against Proliferation of Materials and Weapons of Mass Destruction (this problem is indirectly connected to the energy security issues through the prism of atomic energy use, but nevertheless taking absolutely autonomous and specific place).

The G8 Evian Summit of 2003 saw its focus shift to oil tanker transport security. There was a bid by the G8 to establish a new global regulatory regime of double hulls for oil tankers. At that moment the Japanese resistance didn't allow for the G8 consensus. Nevertheless, this provision is firmly making its way, with standards introduced by the EU. Other energy issues were also discussed, among others the decision to create the G8 Nuclear Safety and Security Group was taken with the Core Principles necessary to promote safe and secure use of civilian nuclear technology.

³⁸ Communiqué. Okinawa Summit, 2000.

³⁹ G7 Statement. Section devoted to world economy. Okinawa Summit, 2000.

⁴⁰ Communiqué. Section devoted to environment. Genoa Summit, 2001.

⁴¹ G7 Statement. Genoa Summit, 2001

Traditionally stronger focus on security issues by the American G8 partners was reflected partly in the way energy issues were viewed at the G8 Sea Island Summit of 2004. The G8 leaders were conscious of the way the terrorist threat could hinder economic growth or recovery, influencing energy prices as well as adding to uncertainty and transactions within the G8 and across the globe as a whole. Although it remains uncertain whether that was particularly the case that helped the G8 leaders overcome their divergencies over American invasion of Iraq, since not all the G8 countries believed Saddam Hussein presented a real terrorist threat and that was the case for the US action.

The last G8 Summit took place in Gleneagles (UK) in 2005. Its first working day was devoted to the questions of climate change, clean energy and sustainable development along with the political ones. The issue of climate change from the very start appeared to be very contentious. It was all but clear from the start that those issues would cause considerable debates within the G8, especially between the USA and the Europeans. It was especially the case since climate change had been a source of division among G8 countries and their civil society stakeholders since 1997 and was not a high profile issue in the public mind (Donnelly 2005). There were also speculations with the journalists few days before the summit started that the climate change document would either be the G7 one vs the USA, or no agreement whatsoever would appear.⁴²

That is why it is not surprising that the document on climate change was only agreed upon at the very last moment. Forecasts of the failure on the issue appeared in press after Guardian published the leaked documents on the course of negotiations on July.

Europeans were arguing from the start that the document was not as ambitious as it should have been, but in this case it wouldn't be accepted by the USA in the first place, but also invoked certain reservations from Russia and Japan. Thus in the end the document won't consist of specific commitments and will be rather ambiguous. Big debates were on the concrete targets on the reduction of GHG emissions. Nevertheless a distinguished G8 scholar Sir N. Bayne argued that all the energy accomplishments fully benefited from and contributed to iteration and institutionalization, as key factors for Summit success (2005).

Although in addition to leaders' declaration on Climate Change, Clean Energy and Sustainable Development adopted a rather long 10-page Plan of Action, the formulas used in the final document actually allow each G8 country to interpret the problem the way they want. Also it is interesting to note, that no less than four fifth of the plan were devoted to energy issues, the priority topic of the next year's Russian G8 presidency. It was stressed that a great need existed in developing new technologies, as well as in reducing CO2 emissions. The developing nations declared that they would support the idea only if it would not contradict development interests of their own economies. It was stressed that rich industrial countries were to assist and share technologies with the developing states for the poorer world the reduction in carbon emissions not to be a big burden.

With the first day considerably devoted to the issues of global economy, a document was adopted on the situation in the global economy and international oil market. From the very start it was supposed to be a very voluminous and far reaching document, but G8 countries actually failed to provide for comprehensive and innovative ideas. At the end there was just one page document with non-contradictory and non-obligatory formulas. Leaders actually agreed that global growth in 2004 was strong and will remain so in the future. But at the same time the G8

⁴²Those who are in a certain degree familiar with the way this elite club functions would know that no G8 country would allow for the crack down and disagreements prevail and thus discredit the united western front on the international arena. If there are profound divergences within the club, then they would either drop the issue completely or (which happens most of the time) adopt a document with no substance and only general wording.

acknowledged that global challenges remained, given special attention to “persistent global imbalances and high and volatile oil prices. Here, I believe. For the first time in the G8 history special recommendations on national economies were forwarded to each of the G8 countries including Russia (were its set of recommendations was joined with those of the EU countries), thus Russia being acknowledged in this way as an important systemic element of the world economy.⁴³

Rapid economic growth led to an increase in global demand for energy supplies and high and volatile oil prices, with the USA and China noted as the front-runners in the world energy consumption. During the discussion the most articulate speech came from Schroeder, where he argued that it is necessary to introduce the conditions for fair prices formation, with all the parties, both suppliers and consumers, coordinating their efforts. Although it was noted by everyone, that world dependence on carbon fuel has decreased over time. Japanese Prime-minister made a very interesting observation, he reminded of the 1970-s energy crisis, when high inflation followed, but nowadays, with oil prices soaring, deflation in Japan continues. Thus disclosing the fact, that in the contemporary conditions modern economies are able to adapt to oil pricing.

A big share of discussion was devoted to necessity of investing into alternative energy resources, mostly into conducting research in the sphere of auto engines. It was agreed on the outreach session with the five fast growing economies that modern economy required flexibility, although mostly being dependent on oil and gas (with greater emphasis on gas further on). During the intervention George W. Bush stressed the importance of Russia to the world economy functioning for being the sole big stable oil exporter, with the countries of the Persian Gulf and Venezuela having big supplies but being risky for the regional and internal instability. V. Putin agreed and noted that at the moment Russia was extracting up to 470 mln tons of oil a year, with the bigger share of it going for exports. He added that Russia was doing everything possible to raise its oil production and invest more into developing transport infrastructure. He dwelled upon the Far Eastern projects of pipe-lines in greater detail, in which he disclosed what wells, routes to the Pacific Ocean would be used, talked about construction of the oil-pipe-line from Siberia to the White Sea (thus providing vastly American consumers), routes to Novorossiysk and about the Baltic transport system.

The Russian president also talked about development of new technologies in gas liquefaction and possible future competition in the market and growing interest of American energy consumers in the plans. During this session it was made known to the other participants that next year the topic of sustainable energy will be taken up and that Russia will do its share of work in order to provide for sustainable economic growth.

What was also important for Russia and answered greatly to its interest is the part of the Declaration (point 6) where leaders acknowledged that there should be a shared responsibility by both oil producing and oil consuming countries and further investment in infrastructure in the sphere, emphasizing the role to be played by the International Energy Forum (EIF), not the IAE (in which Russia is not a member). What was more difficult for Russia to accept, though beneficial in the long run, was the agreement to increase transparency and to come to a universally agreed reporting system for oil supply and demand (data on oil reserves was kept in secret since the Soviet times). Although nowadays Russian officials even made several proposals to enhance the agreed Joint Oil Data Initiative (JODI) put forward by several international organizations (and Germany within the G8) by encompassing the whole chain from oil extraction to the final stage.

⁴³ Though we still have to wait for September meeting of finance ministers in Washington DC to see whether there will be the full-fledged financial G8.

Energy security topic was chosen by this year Russian presidency as one of the three priorities for the G8 St. Petersburg Summit. There has already been some movement on energy issues apart from regular expert and official work. A week ago Moscow saw the G8 + 5 (China, India, Mexico, Brazil, South Africa) + 3 (World Bank, OPEC, IAEA) international energy ministerial meeting. No substantial divisions were fixed at the meeting. In the final documents ministers supported three positions, pushed by Moscow – need for mutual and fair access to energy markets, validity of diversification of supply and the right of the third countries to develop nuclear energy. Although, a kind of failure could be considered absence in the text of the topics of guarantees of demand, actively supported by the Russian President. The participants also agreed to increase market transparency of world energy, introduce clean energy technologies, and came to conclusion of nuclear energy taking a more prominent place in future world energy balance.

In Defense for the Energy (St. Petersburg and beyond)

Now I'd like to have a brief look into why this topic has the right to take the leading place in the summit agenda, not just for Russia being able to contribute to the problem solution significantly. It is clear that energy issues not only were among the founding factors for the G7 birth, but regained their importance in the beginning of the XXI century. And there are several reasons for it, with rising economic giants, like China taking the first place being an important, but nevertheless not the only factor (Although we cannot underscore its significance. If we look back into 1990, we'll see that than China and India accumulated 5% of world energy demand, but in 2004 this figure rose to 11%, to say it differently out of the whole increase in energy consumption 35% is taken up by these 2 countries. Not a small share in this increase is taken up by other rapidly developing countries like Brazil, Mexico etc).

One of the other reasons for the stir is that although we've watched the information revolution along with the other ones to occur, there was no energy revolution in place. The other thing is that all the hopes placed on the nuclear energy sector were not realized. Over the 3 decades nuclear energy sphere provoked so many political problems that nowadays fears prevail over its usefulness, especially it concerns strengthening of the control over the proliferation of nuclear materials.

The other revolution that didn't occur was the one in the sphere of transportation of energy resources to its consumers with nothing virtually changed over the quarter of a century. Evian Action Plan on Marine Environment and Tanker Safety is an important step, but nevertheless to be more efficient the other step is already urgently in need – rapid development of pipe-line nets and securing their safety (Still with tankers staying the important part of transportation nets the acute problem is the one of large-capacity vessels). That is why today when we see unstable countries surrounding Russia, the G7 with USA in particular take special interest in providing for control over those territories not only to secure oil and gas fields, but oil and gas pipe-lines as well.

Many experts today agree that OPEC countries are working on the edge of their respective output. Although it was declared recently that by the end of 2006 it would be possible to raise the extraction by four million barrel per day (it is believed that it can be possible only in cases of Saudi Arabia, UAE and Iraq for Indonesia, Venezuela and Nigeria work on the edge).

The situation is complicated due to necessity of huge investments into further modernization of the industry. Big problem stays its ecological component, with more to be said about it later on. Other segments of the problem are increase in prices of the vessel freight as well as moving to

the other standards of double-deck vessels, then the activities of oil profiteers and the last, but not the least – decline in the value of the dollar. All this adds to instability of oil markets and makes the energy problems a priority.

As I've mentioned before, since Russia is a huge player in this sector, being the second largest exporter in the world, it is not but natural that RF is among the most active participants in the process. Late last December Germany proposed an Action Plan on stabilizing world oil markets with increasing investments into prospecting and extracting, upgrading transparency and introducing new Joint Oil Data Initiative within the framework of IEA. The Russian proposal was to improve not only already existing statistical elements, but to introduce the new ones to be able to follow the whole chain. Other initiatives embraced energy efficiency, ecological component and harmonization of taxation, many of which were taken up by the British presidency this year.

Also in the past 15 years a new challenge has become more evident, that is climate change. Most scientific opinion attributes this phenomenon to growing greenhouse gas emissions from man's activity, with most of it derived from the energy sector. There is therefore an additional incentive to invest in energy R&D in order to develop less carbon intensive technologies to provide the world's energy services to be able to meet the challenges of the XXI century. The environmental concerns, especially in relation to climate change have come to the fore with most G8 countries claiming it to be among the priorities. Certain topics to be cited on the issue are bioenergy; "clean coal" power plant technology based on coal and natural gas; CO₂ separation and storage; energy efficiency in buildings; fuel cells, hydrogen and energy storage. The other topics include energy efficiency in industry and in the commercial sector; nuclear fission; renewable energy technologies (other than biomass and PV) including wind (especially offshore), solar thermal heating and cooling, concentrating solar power, hydropower, geothermal and ocean energy etc. With many countries citing nuclear research as a priority, it sometimes refers to different things. For example, a number of countries are focused on the next generation of power plan in the GEN IV initiative, but Russia and Germany are mostly interested in waste management, nuclear safety and decommissioning.

Conclusion

It is worth stating that the G7/G8 activities, along with the work done in the other international organizations like IEA, in the energy sphere contributed greatly to countering energy shocks generated by the military, political and structural risks. The policy of the leading industrial countries in the sphere led to an overall stabilization. Countries turned and effectively implemented high energy saving technologies, that allow for the rapid economic development (or recovery). Changing the world energy balance helps not only to achieve the economic ends, but also plays a big role in achieving environmentally sustainable development (with moving to clean and alternative energy sources). Another aspect is that actions taken to diversify energy supply and demand, create and increase oil reserves etc. substantially reduce the risk of repeating energy crises in future.

To generalize the G8 discussions on energy issues one could see that basic priorities of future G8 strategy are focused on adopting measures stabilizing world energy market; creating new infrastructure capacities for this market; rendering assistance to the poorest countries (energy producers as well as consumers); setting rapid reaction systems to the international energy security threats. Besides a big share of attention is given to neutralizing negative environmental implications of current world energy development, elaborating new energy technologies, including alternative energy sources.

The framework of the above said leads to several general tendencies for the G8 measures that are currently being worked out. Primarily it concerns the world energy market stabilization, with first place given to price situation. Natural factors of energy resources supply nowadays could be evaluated. Energy crisis as such is less dangerous for a world energy order, then it was in the 1970s, since today oil and gas exporters became organic element of globalized economy.

Nevertheless it doesn't mean that the G8 countries shouldn't take steps in energy security sphere to increase predictability of world energy market, promote transparency flows, take preventive measures on infrastructure development, coordinate exporting and importing countries' interests, taking into account their current and prospective place in the world economy.

Apart from the military protection of unstable oil-exporting regions there are more aspects of international energy security: protection against short-term shocks (in this regard the G8 actively support the strategy of increasing strategic oil reserves in line with other international organizations (like IEA, EU), and possibility to direct funds, allocated for explorations, directly to the world energy resources centers.

The problem with the first component lays with the reality that developing countries usually don't possess such reserves. Since among the fastest growing economies are the developing countries, they could suffer a huge blow in case of a short-term shock (that's where lay the possibility for assistance from the G8 and OECD). With the second aspect mentioned, there are possibilities for the G8 action in examining ways of improving legislation for the international investments into energy sector, since many rich in oil regions suffer from bad governance, which hinders foreign investment flows.

As showed above, with rather substantial progress, there still exist plenty of dangers for further sustainable world energy and economic development, which leaves a big role for the G8, IEA, IEF and others to play in future.

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