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2-nd meeting
of Arctic expert club
(23 October 2015)



**“Green economy: the environmental imperatives for economic development
of the Russian Arctic”: Resolution of the round table**

Abstract. Here we publish the resolution of the round table “Green economy: the environmental imperatives for economic development of the Russian Arctic”, held within the framework of the 2nd meeting of the Arctic Expert Club on the 23rd of October 2015. The organizers of the round table: the Institute of Regional Studies and Urban-planning of the Higher School of Economics, Arctic Center for Strategic Studies NArFU named after M.V. Lomonosov. Co-organizers the Russian Institute of Strategic Studies (RISS).

Keywords: *Russian Arctic, “Green Economy”, environmental assessment, safety, accumulated environmental damage, dumping, marine natural resources, infrastructure, tourism, atlas, politics, international cooperation*

Russian Arctic includes both the land areas of the Arctic zone of the Russian Federation (the Russian Arctic), defined by Russian Presidential Decree № 296 of May 2, 2014, and the seas of the Arctic Ocean. The Russian Arctic and the Arctic Zone of the Russian Federation, as identical concepts – are inland sea territorial waters; exclusive economic waters areas of the Barents, White, Kara, Laptev, East Siberian and Chukchy seas; the continental shelf, defined by the UNCLOS; the waters of the Northern Sea Route as a historically established national transport communication of the Russian Federation; all as discovered and possible to be discovered areas and islands, located in the Arctic Ocean; northern territories of the Russian Federation, its subjects and municipalities on the coast of the northern seas bordering the Arctic Ocean and providing security of the Russian state; airspace (© Y.F. Lukin, 2015).

Local internal waters (12 nautical miles), the exclusive economic zone (200 nautical miles), continental shelf (350 nautical miles) — terms of the international law, UNCLOS. Their use is correlated with international enforcement practice. “Water area of the NSR” is defined in the federal law 28.07.2012 N 132-FZ “On Amendments to Certain Legislative Acts of the Russian Federation regarding state regulation of merchant shipping in the waters of the Northern Sea Route”.

Determining the internal borders of sea waters in the Arctic and the Far North of Russia could be defined as the emerging area of the Arctic National transport line (ANTL) from Murmansk to Petropavlovsk-Kamchatsky, which was discussed in the Council of Federation of the 28th of January 2016 at the meeting of the Expert Council of the Arctic and Antarctic and (chairman V.A. Shtyrov). Objectively, however, we need to add 2 more ANTL seaports hubs in Arkhangelsk and Vladivostok. As a result, all of the sea coast from Arkhangelsk and Murmansk to Petropavlovsk-

Kamchatsky and Vladivostok will be included in ANTL. Russian waters of ANTL is longer than the NSR historically marked in the last century, fits the requirements of transportation and logistics, international shipping and trade.

The thesis of “everything discovered here and possible to be opened here land, islands located in the Arctic Ocean” is cited by the Order of the USSR Presidium of the Decree of 15 April 1926 “On the declaration of the USSR territory, lands and islands located in the Arctic Ocean”. Climate change may contribute to both the emergence of new and disappearance of old islands, which requires permanent verification. It should be taken into account that at the same time the world's oceans there is a struggle even for the most minor rocks and islands.

The composition of the Russian Arctic — AZRF, thus, keeps the best traditions (Russian empire — the Soviet Union — the Russian Federation) and legal connection with the acts of 1916, 1926, 1989, 2008. When the territories, islands and waters of the Arctic were included in the Russian Arctic (not only the land but also the sea) certainly a multidisciplinary approach was used to take into account not only the astronomical (Polar Circle), physical, geographical and bioclimatic approach, but also the administrative and territorial division from the standpoint of control, geo-cultural approach, cultural and historical traditions of the regions and their geopolitical importance, socio-economic and other criteria.

The Arctic is a special, complex ecosystem and at the same time unique in terms of international relations and transnational environment. It is an area where many of the modern world actors communicate: the states and their unions, international organizations, society and business, TNC and people. We may not realize it fully but Arctic is not only raw materials, carbohydrate delivery, and the whole landscape of the Russian Arctic but it is a real national wealth of our country, the quality of which largely determines the stability of biospheric processes, global climate, economic development, health of the population of Europe and Asia.

Today, Russia is actively returning to the Arctic, reviving the Northern Sea Route, its infrastructure, integrated solutions and etc. However, the strategy adopted, a long-term program of development of the Russian Arctic at federal and regional levels today does not work as we would say, it often turns out “as usual” due to various reasons. The conditions experienced by the financial and economic crisis, sanctions against Russia, a collapse of oil prices, devaluation of the ruble, worsening of geopolitical situation, the war against the ISIS — a terrorist organization banned in Russia, a new cold war, make the public targeted investment programs, especially at the regional level likely to become the future business.

In these difficult conditions it is more than urgent to provide, here and now, economic and environmental balance, protection of the natural and cultural environment in the Russian Arctic, understand and implement a transition to a green economy technologies for the benefit of the entire population, accounting that Arctic area is characterized by extremely vulnerable nature and long-period of its recovery. In the Arctic and the North of Russia the 6th technological order and the green economy has not yet become widely available, but they are the future.

The transition from the traditional model of economic growth to the “green economy” — is on-trend with reliance on resource-saving and environment-friendly production and elevated well-being and reduce of the risks of natural and cultural damage. The key issue of the green economy in the Arctic becomes a transition to a new technology of recycling, the creation of non-waste production. The green economy must turn the cart-waste back into the production cycle, causing minimum damage to the environment. The main problem today is largely in the economic price of the issue, the extent of the expenditure, and payback of environmentally friendly projects in the transition to a green economy in the North. Where to get the necessary resources and to find sources of funding for the promotion of the green economy in the Russian Arctic? The question often remains open, especially in the regions as the search of investors and implementation of projects based on public-private partnership.

It is important to have an assessment of human impact on the environment on the basis of inventarization of sources and facilities of such an impact; to collect information about the pollution of environmental components of the Arctic ecosystem and the violation of its state. In the Russian Arctic for several years we had a large-scale cleaning of islands and coastal areas and the removal of waste. This work actively involved regions, federal departments and agencies, including the Ministry of Defence of the Russian Federation. In 2011—2015 we worked on the assessment of AED and cleaned the Arctic areas: archipelago of Franz Josef Land, Wrangel Island, the settlement Amderma, Svalbard, and etc. The challenge now is to prevent future conflicts associated with the emerging of new polluting industries and especially it is important to pay attention to the development of housing, services and urban infrastructure of Murmansk, Vorkuta, Norilsk, Arkhangelsk, Severodvinsk, Tiksi and other cities and towns, where 80% of the total population of the Russian Arctic live in permanent and shifting settlements.

Creation of modern research and forecasting is extremely relevant for today in order to ensure the introduction of new knowledge, technologies, methods and accelerate the development of the production, of high-tech industries and green economy in the Russian Arctic. Conceptually, “green” economy is very close to the traditional culture of northerners, their worldview, values and can play a huge role in the future in the socio-economic and cultural development of all indigenous communities, large and small numbered peoples of the North, Siberia and the Far East.

Within the framework of the 2nd meeting of the Arctic expert club it as considered a key issues of green economy, environmental safety and the development of the Arctic resources; approaches to balance of economic and environmental development of the territories; current trends in the field of elimination of accumulated environmental damage (AED); modernization of management, regulatory and legal framework to ensure environmental security activities in the Russian Arctic; the development of the Northern Sea Route and the prevention of pollution of the northern seas due to the oil spills; problems of socio-economic and environmental development of industrial towns, located in the Russian Arctic; organization of international environmental cooperation and etc. It was noted that research activities in the Arctic, had stopped in the early 1990s, and in the last decade researchers in geophysics, seismology, archeology, glaciology, biology, geology, meteorology, environmental monitoring presented some new studies but they do not allow to form a scientific justification for the development of alternative economic activities in the high latitudes. The main problems is the interdisciplinary and cross-border interaction, the complexity of ordering and generalization of multidisciplinary information, assessment of environmental factors and results of human impact on the environmental protection issues.

1. Participants in the round table noted that sustainable ecological and economic development of the Russian Arctic on the principles of green economy requires solving of the economic and ecological issues:

- a) Integrated environmental management, using modern ecological and low-waste technologies of green economy, contributes to preservation of the Arctic eco-system with its new industrial development. Storage, removal, set and export of waste from the regions of the Russian Arctic, as well as their recycling, reduction of pollution should be one of the main conditions taken into account in the planing and implementation of any kind of state and businesses activity in the Russian Arctic.
- b) Use of advanced power generation technologies (eg, the project of Mezen hydroelectric power plants), the development of bioenergy for the local heat supply of the northern territories, the modernization of municipal energy efficiency system, the construction and transport, careful attitude to the consumption of water and access to the global market with new energy products, waste management compulsory for all stakeholders in the Arctic — these and other measures might give Russia unique opportunity to take

a leading position in the the green economy and the reassessment of values in the world.

- c) Optimization; the identification and deployment of promising economic activities with a regard to the needs of economy and environmental safety; planned liquidation of “dirty” industries and past environmental damage in the Russian Arctic; measures for environmental protection in the areas with the emergency ecological situation, areas of environ-cal disaster with a regard to the threats to the life or health of people.
- d) Diversification of economic activities in the Arctic and in the North of Russia on the basis of effective use of biological resources in waters and on land; development of transport and communication infrastructure, Arctic tourism, services and other activities.
- e) Search for funding, the use of public-private partnership and other instruments for the active promotion of investment projects of green economy, introduction of modern technologies with the participation of science, government, business, private capital and the youth.
- f) Carrying out complex research projects in different scientific area of green economy, environment, natural resources, geophysics, seismology, archeology, glaciology, biology, geology, geography, meteorology, environmental monitoring, culture, history, philosophy using the RAS resources, universities, federal institutions, research foundations, and etc.

In order to prevent negative environmental impacts at the stage of the new industrial development of the Arctic, using the technology of the 6th technological order, it is important:

- 1.1. Interdisciplinary study: socio-economic, environmental, geopolitical, socio-cultural, physical, geographic, geological and geomorphological, meteorological, hydrographic, mapping; analysis and synthesis of the strategic directions of socio-economic activities, infrastructure and complex logistics systems for life support, perspective use of technologies of the sixth technological order in the Russian Arctic, in the Far North of Russia and on the territory of the Russian regions and on Svalbard; preparing appropriate analytical materials, databases, models of development done by the project teams of specialists of different areas of scientific knowledge.
- 1.2. Comprehensive analysis of the investment attractiveness of the AZRF and the Far North of Russia, taking into account the socio-economic situation, the strategic environmental assessment (SEA), the principles of the green economy, opportunities, risks and threats, determine the potencial investors.
- 1.3. Development and implementation of Arctic project portfolio at the federal, regional and municipal levels, including projects of green economy, based on interdisciplinary environmental and economic, socio-cultural assessment of their values and priorities that involvs specialists in various areas of scientific knowledge.
- 1.4. The implementation of social development projects and communications infrastructure of the Russian Arctic, the Northern Sea Route, Arctic National transport line (ANTL).
- 1.5. Selection of options, models of development of the subjects of the Russian Arctic, based on a multidisciplinary analysis of the development prospects of innovative and competitive sectors of the green economy, taking into account the needs of the indigenous peoples of the North, Siberia and Far East, creating new jobs and training, especially for young people.
- 1.6. Interdisciplinary scientific conceptual study for the establishment of legal, social-economic and organizational conditions for the development of small and medium-sized business in the municipalities of the Russian Arctic and the Far North of Russia, including the green economy.

- 1.7. Strategic expert evaluation and development program of the Arctic tourism, its potential, perspective tourist products of the northern territories, and areas of environmental impact in the AZRF and the areas of the Russian presence on Spitsbergen.
- 1.8. Creating a database of ecological sensitivity of the Arctic territory and waters to pollution, oil spills and dumping; analysis of the mining, oil, gas and other industries in impact areas and environmental hot spots in the Russian Arctic.
- 1.9. Effective and operational training of a highly qualified personnel to work in the high latitudes and polar regions of the Russian Arctic, including the training of masters; obtaining additional education for work in “green economy” — the Northern (Arctic) Federal University named after M.V. Lomonosov and other Russian universities.

2. An important prerequisite for the establishment and effective functioning of the mechanism for the implementation of ecologic programm of the Russian policy, including the one in the Arctic, is the modernization of management, excellence, availability of legislation and its strict compliance by all economic entities. It is recommended to implement political, legal and scientific activities with the goals of environmental protection, environmental safety, green economic growth in the Russian Arctic:

- 2.1. Develop a “Concept of the green economy in the Russian Arctic”, using the potential of the Federal Research Centre for Comprehensive Study of the Arctic of the Russian Academy of Sciences, Kola Science Centre, NArFU named after M.V. Lomonosov and other organizations.
- 2.2. Development of “Environmental Security Strategy on the development of the Arctic for the period until 2030”.
- 2.3. Strategic environmental assessment (SEA) of all the industrial, infrastructural projects and programs with the involvement of local communities and science in terms of the environmental issues of the Russian Arctic, its waters, the objects on the Novaya Zemlya and the other islands of the Arctic Ocean, regardless of their departmental subordination.
- 2.4. Amendments to Legislative Acts of the Russian Federation on environmental protection, ecology, continental shelf, the exclusive economic zone, territorial waters of the Russian Federation, as well as the adoption of a number of other legal acts.
- 2.5. Formation of ecological unit and thematic maps in preparation for the National Atlas of the Arctic based on the fundamental natural and complexity of the research, the universalization of practical use.
- 2.6. Assessing the impact of dumping on the environment of the Arctic and social conditions of indigenous peoples, taking into account the transboundary transportation of pollutants, monitoring of disposal sites, registration of dumping and publicity of information on these issues.
- 2.7. Implementation of the program “Elimination of accumulated environmental damage” (EAED) in Russian part of the Arctic.
- 2.8. Publication of the full list of all the islands in the Russian Arctic under the bylaw “ State register of the Russian islands in the seas of the Arctic Ocean”, with the actual status of each of the Arctic islands and its departmental belonging.

3. A particular relevance to the Russian Arctic and the Far North of Russia has the balanced development of industrial towns. The share of the Russian Arctic regions is a fifth part of all Russian industrial towns, the majority of which is in the decline. Diversified industrial towns and settlements of the Russian Arctic have become the most vulnerable due to its geographical location, historical

development, industrial specialization and low competitiveness of enterprises, declining population and a high proportion of industrial waste.

- 3.1. A comprehensive approach to the reorientation of the structural and functional organization of single-industry towns. Environmental problems of cities require more detailed dis-looking as a result of ongoing and projected changes in the environment.
- 3.2. Sustainable development of single-industry towns, based on the introduction of "green technologies", Deaver-fication struktry economy will advance to a more eco-efficient pro- duction and rational use of local resources, to change the existing in-Frast-rukturu, improve the well-being, quality of life and public health.
- 3.3. There is an opportunity to find new ways of development of natural resources, development of ma-small and medium businesses, Stockpiling and use of human capital.

4. In the context of the current geopolitical situation and the active implementation of the state policy on development of domestic and international tourism, the relevant issues are the opportunities for the development of the *Arctic tourism*. This will diversify the sectoral specialization of Arctic macroregion, changing the orientation of the operation with non-renewable mineral resources, production of which could be and it has already been a significant environmental risk. Taking into account the fact that tourism is a niche tourist product, the objective of tourism and its development available now are:

- a) the existence of protected areas in regions which have the ability to receive tourists, the National Park "Russian Arctic", "Berengiyya", "Onezhskoe Pomorje", "Yugyd va" and others.
- b) development of sea tourism along the Northern Sea Route, to the North Pole, the islands in the Arctic Ocean;
- c) the trend of growing interest in the environmental, ethnographic, sports and other types of turism among both foreign and Russian tourists.

The key recommendations are:

- 4.1. Encouraging the regional initiatives for the creation of tourist clusters and supporting them at the federal level at the expense of the Federal Target Program "Development of domestic tourism in the Russian Federation (2011-2018 years)".
- 4.2. Formation of a competitive Arctic tourism product and its promotion on the Russian and international exhibitions with the participation of the Federal Agency for Tourism Development.
- 4.3. Measures to ensure the conservation of cultural and natural environment of the Arctic, natural and cultural heritage while organizing the tourist routes, cruises, excursions and environmental education of the population.

5. Not less important is the optimization and improvement of the system of remote sensing (SRS) of the Earth; the use of GIS technology, GLONASS potential for rapid assessment of the environment in order to solve the problems of transport and communication and saving people; socio-economic and infrastructure development of the Russian Arctic; information and communication technologies and effective management decisions.

6. Of particular significance is the further development of international cooperation in the Arctic. The Arctic is becoming an increasingly important in global politics and economy. Arctic region has huge natural resources and good transportation facilities, attracts the attention of not only the Arctic countries (A8), but also in China, Japan, South Korea, India and other countries. The ongoing climate changes open water space of the Arctic not only for the development of hydrocarbon, mineral and biological re-resources, but also for new shipping routes in the global transport system (the Northern Sea Route and the Northwest sea passage, the National Arctic transport line).

Issues relevant of the international cooperation:

- 6.1. Russia's transition from periodic research of radioactive contamination of gamma emitting radionuclides to the constant monitoring of the problem is followed by a public presentation of the Integrated program to clean up the waters of the radioactive waste also aimed at removing the ground for speculation about the Russia's inability to ensure the environmental safety in the Arctic.
- 6.2. Russia's national interests in the Arctic should be expressed in a permanent activity:
 - a) protection of the legal status of the Russian Arctic, transport communications and available natural resources through the application of UNCLOS (1982) and international law;
 - b) preventing the transition of the Northern Sea Route (NSR, NATL) under international management, providing quality services and systematic assistance for the vessels on these routes, presentation of high environmental requirements for vessels passing the NSR;
 - c) ensuring permanent or seasonal presence in the Arctic: scientific expeditions, transportation, fisheries, mining, temporary settlements;
 - d) empowerment of permanent observers in the Arctic Council, the gradual increase of their role in support of the permanent observers;
 - e) following the environmental safety standards by all the Arctic states, businesses, TNC and people.
- 6.3. Protection of the Russian Arctic as a national resource base and transport artery should be provided mainly by diplomatic means.
- 6.4. Determination of the position in respect of the China's aspirations in the Arctic based on the context of Russia-Chinese strategic partnership which is a factor of a multipolar world through a combination of prudent and calibrated balance of national interests and mutual cooperation.
- 6.5. Attracting foreign investment, international cooperation and integration of efforts, re-resources and technology for the full development of the Arctic and the implementation of significant investment projects on the principles of the "green economy" and sustainable development at the UN agenda until 2030.
- 6.6. International environmental cooperation in the Arctic in order to counter global threats related to the limitation of natural resources, habitat destruction and climate change.

7. The roundtable participants raised another important topic — the environmental consequences of the increased navigation along the Northern Sea Route, which is a major transportation routes and one of the leading factors in ensuring sustainable socio-economic development of the coastal areas; it is essential to ensure national security and strengthening Russian presence in the Arctic. One of the most important state decisions on the development of the NSR is a "Comprehensive NSR Development Project" (June 2015), which included a proposal of the NSR Administration for all year round use of the route and icebreakers assistance, equipment and personnel, diving operations and oil spill response. This depends on the allocation of funds from the federal budget.

8. At the round table it was highlighted the importance of government involvement in solving the problems of spatial planning for maritime and coastal activities in the Russian Arctic. The basic principles of ecologically sustainable management of marine areas and coastal areas are:

- 8.1. A balanced account of the economic, social and environmental conditions in the planning of marine economic development activities.
- 8.2. Optimization of marine resource use on the basis of ecological and economic approach.
- 8.3. Conservation and restoration of natural marine ecosystems and their biological diversity.

8.4. Preservation of unique, representative and environment-forming natural marine and coastal systems, and creation of basin systems of protected waters and coastal areas.

8.5. Preventing negative environmental impacts of economic activities and accounting of future environmental impacts.

8.6. Preservation of underwater cultural heritage.

8.7. Prevention, minimization of conflict relations between water areas.

Use of these principles for marine and coastal spatial planning related to the definition of environmentally and economically sound spatial solutions between different types of areas and territories (depending on their condition and use).

9. The roundtable participants noted that the Russian mainland part of the Russian Arctic and Far North is connected with the south of the country by the river flow systems, covering about two-thirds of the country's area, which is a favorable factor for the rapid mutual development of the green economy. Communication between the AZRF with the south of the Urals, Siberia, the Far East, the economic potential of the regions of concentration is a powerful factor for the development of green economy of the adjacent land areas in the Arctic and use of the maritime resources. Such a role could be performed by the basins of the Ob, Yenisey and Lena. Specifically it is needed to complete the reconstruction of Ket-Kassky channel (Ob and Yenisei) which is used to pass from the Ob River basin via gateways along the Angara cascade of the WP to the Baikal region and back. Also, the creation of a single water system Ob - Yenisei - Baikal will stimulate the flow of tourists.

10. At the end of the 2nd meeting of the Arctic expert club some specific recommendations and proposals to the federal bodies of executive power have been formulated.

10.1. Ministry of Economic Development of the Russian Federation and the Ministry of Energy of the Russian Federation were recommend to start development projects on the use of renewable energy resources in the Arctic zone of the Russian Federation (wind, water), based on existing positive experience of Russia, Canada and the United States.

10.2. Government of the Russian Federation, the State Commission on the Development of Arctic was recommend to develop the regulatory documents for the period up to 2025-2030 years; to correct and improve the Development Strategy of the Russian Arctic and the Russian State Program on socio-economic development of the Russian Arctic.:

10.2.1. To identify key objective of socio-economic development of the Russian Arctic: improving the quality of life of the population, including the indigenous peoples of the North, Siberia and Far East.

10.2.2. To refresh the goals, objectives and actions for the development of the Russian Arctic in legal acts and strategic planning documents of the federal and regional levels, accounting the priorities of the green economy and redistribution of funding.

10.2.3. To develop a comprehensive plan of priority measures for the development of green economy in the Russian Arctic in the medium and long term perspective.

10.2.4. To enable the state support activities for the development of areas and municipalities of the Russian Arctic, aimed at:

- a) consolidation of the working population, especially youth, poverty reduction measures due to the higher costs of living in northern conditions, creating new jobs, improving the qualifications and additional training, improving the pension system;
- b) fast development of social, communication and transport infrastructure, utilities, roads, social facilities, corresponding to the northern conditions;

- c) the optimization of the local bio-energy, the introduction of energy saving technologies and materials, use of renewable energy sources;
- d) support for innovation, modernization of traditional industries, support for indigenous-peoples of the North, Siberia and Far East, the introduction of effective mechanisms of compensation and reimbursement of expenses (losses) caused to the environment and indigenous peoples, job quotas in the leading sectors of the economy and the organization of the additional professional education system;
- e) improving the quality and accessibility of education, cultural development, preservation of the positive values of the population in the Russian Arctic and the Far North of Russia;
- f) introduction of advanced technologies in communications, telecommunications, telemedicine, education, television and etc.;
- g) the price, tariff, tax and custom encouragement for the development of industries, taking into account the especially of development of the Arctic and Far North regions of Russia;
- h) the development of the environmental monitoring system, control over pollution of the natural environment, traditional territories of the indigenous peoples and negative environmental impacts caused by the economic and other activities;
- i) to provide security in the Russian Arctic (land of the Russian Arctic and Arctic waters).

10.3. Ministry of Transport of the Russian Federation, the EMERCOM of the Russian Federation and their departments, whose mandate includes work on request and assistance in accordance with the Agreement on cooperation in the field of rescue and response to marine pollution with oil in the Arctic (2013), were recommend to initiate a meeting of the parties to discuss the coordination and organization of joint exercises in order to deal with the oil spills. And also to initiate the discussion of this issue at the international level within the Russian-American group of joint planning (GJP) and to organize joint exercises on oil spill response in ice conditions as close as possible to the worst scenario.

10.4. Ministry of Natural Resources and Ecology of the Russian Federation were recommend to revise the adopted methodology for calculating financial support of the activities under the prevention plan and response to oil spills, including compensation of harm caused to the environment, bioresources, life, health and property of citizens and legal entities (MEP of Russia order №202 May 6, 2015). According to a number of experts, supported by the Public Council under the Ministry of Natural Resources and Ecology of the Russian Federation (report №68/17-s 30 September 2015), this method could not fully provide compensation for damage caused to the environment, the citizens and legal institutions. The technique actually introduces the principle of compensation made by the persons responsible for the pollution instead of full compensation, which is contrary to the Federal Law "On the continental shelf of the Russian Federation", and "About internal sea waters, territorial sea and adjacent zone of the Russian Federation". It should be taken into account when calculating the financial reserves for compensations and basic fees of the Ministry of Natural Resources for calculating the size of the environmental harm as a result of accidents on water.

10.5. Ministry of Energy and the Ministry of natural resources and ecology of the Russian Federation are encouraged to provide the statistics of volumes, areas and coordinates of oil spills. Government of the Russian Federation approved a paper №2556-p "On approval of the list of compulsory forms for the subjects of the state information system of fuel and energy complexes in order to provide the information to be included in the state information system of energy complex" The proposed list of forms, unfortunately, does not contain the requirements for information on the volume and area of oil spills. This decree introduces a requirement to provide

information about the loss of oil in the main pipeline. Thus, the information system of the fuel and energy complex-matic does not provide the state supervisory authorities and the citizens of the Russian Federation with the information about emergency on the oil pipelines, which are the main source of oil impact of the environment. It is clear that federal agencies need to initiate amendments to the relevant instructions of the Russian Government in the form of reporting of data on volumes, areas and coordinates of oil spills on the pipelines.

10.6. Rosprirodnadzor, Roshydromet, the Administration of the Northern Sea Route, the regional supervisory authorities in the field of environmental protection, oil companies involved in production and transportation of oil and oil products on the shelf seas of the Arctic ocean are recommended to consider the experience of civil society organizations in monitoring and environmental violations, taking into account compliance with the requirements of the Russian legislation.

11. Rosprirodnadzor was recommended to organize the coordination of Rosatom, Roshydromet, EMERCOM of Russia, Minmorrechflot of Russia, the Russian Ministry of Defence, Administration of the Northern Sea Route, the Northern Fleet of the Russian Navy, Russian Space Agency, non-governmental environmental organizations in order to create an integrated database of damaging objects and processes, dumping and its impact on environmental safety in the Russian Arctic and the Arctic ocean with a regard to the previous experience in environmental damage response in the Arctic.

12. Debatable and controversial in public opinion was and still is the issue of a total ban of economic activity in an extremely vulnerable ecology in the Arctic region, underscoring the relevance of the public discussion of the issue at a meeting of the Commission on the Development of the Arctic. It makes sense to examine the problem comprehensively, taking into account the prospects of development of the green economy, the possible introduction of temporary restrictions on the production of hydrocarbons in the deep offshore areas. Private business and state companies offer to focus on coastal waters, on the use of technologies of oil production, use of land deposits and associated gas. Also it is important to consider the question of development or correction of specific environmental standards for the Russian Arctic, taking into account the world experience, the achievements of modern science and law.

13. NArFU Rector, Doctor of Philosophy, Professor E.V. Kudrjashova was recommended to consider regular status of the annual conference "Arctic Social and Environmental Forum", promoting it as a permanent brand of the Northern (Arctic) Federal University named after M.V. Lomonosov within the country and on the international level.

14. There is a need to establish a working group to develop a strategy for the environmental safety concept in the Arctic on the basis of the Council for the Study of Productive Forces (SOPS) of RAS, Ministry of economic development, the Institute for Regional Studies and Urban Planning SRI Higher School of Economics and the NArFU Arctic Centre of Strategic Studies .

15. Send the resolution of the round table of the Arctic Expert Club of the NArFU Arctic Centre for Strategic Studies to: V.A. Shtyrov — chairman of the Expert Board on the Arctic and Antarctic under the Council of Federation of the Federal Assembly; A.G. Ivanov — Secretary of Expert Board on the Arctic and Antarctic under the Council of Federation of the Federal Assembly; D.A. Rogozin — chairman of the State Commission on the Development of the Arctic in order to organize the joint cooperation and partnership.

16. To entrust the control over the implementation of recommendations on the NArFU Arctic Center for Strategic Studies (Director K.S. Zaykov) and the Institute of Regional Studies and Urban Planning SRI Higher School of Economics (deputy director E.E. Plisetsky).

17. Publish the final resolution in the scientific e-journal "Arctic and North" of the NArFU Center for Strategic Studies.

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