



ROSATOM

State Atomic Energy Corporation "Rosatom"

ROSATOM's vision of Nuclear Science & Applications for a Sustainable Marine Environment

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September 2013

Sustaining Planet: Overall Mission



- **Key points of mankind development: long-term sustainable management of natural resources, environment protection, biodiversity and biological balance conservation**
- **Global climate change, biosphere integrity and increasing of resources consumption lead to necessity of consolidation of efforts while facing challenges**
- **The Ocean covering 70% of the Earth surface is the most defining but sensitive element of our planet.**
- **Protecting and recovering of nature systems are priority tasks for Russian Federation, the year 2013 is declared as a Year of Environment Protection**
- **State Corporation ROSATOM pays close attention to environment protection and fully supports the IAEA's efforts on discussing, sharing & promotion of Nuclear Science and Applications for a Sustainable Marine Environment**

The Arctic: Importance and Challenges

- Arctic region is the strategic region for Russian Federation with the prosperous economic potential and unique fragile environment, zone of peace, stability and cooperation
- Features of the Arctic region – extreme climate conditions, distance from the main industrial centers and the lack of infrastructure, low population density, low stability of ecological systems that determine the biological balance of the Earth's climate, their dependence even on minor anthropogenic influences.
- Since 1930s the Northern Sea Route is the most important integrated national transportation link of Russia. Now it becomes the same for the world economy allowing to reduce the charges considerably.
- To implement the potential for considerable expansion of Northern Sea Route utilization ROSATOM is reinforcing on continuing basis his the most powerful icebreaker fleet in the world.



Protection of Unique Environment and Sustainable Development of Arctic

Rehabilitation of the area of military & economical activities

- Rehabilitation of the marine & coastal zones including international projects, e.g. Northern Dimension Ecological Partnership
- Recovery, purification & recycling of industrial and radioactive wastes
- Ecological & radiologic monitoring

Environmental-friendly development of the Arctic resources

- Improvement of the ecological & radiologic monitoring techniques
- Man-made pollution prevention
- Effectiveness increase of natural resources' extraction & any kind of industrial activity (new energy sources, new materials)
- New techniques for exploration survey and geological modeling

To provide the sustainable development of the Arctic region as the strategic resource base ROSATOM's scientific complex is working on the wide range of applied nuclear technologies & techniques.

- **Current environmental challenges that the mankind faces could be solved only by consolidated efforts of all countries. IAEA assistance as the integration and communication platform could contribute considerably.**
 - **Mankind progress demands the increase of effectiveness of natural resources' extraction and utilization. At the same time the strategic natural resource base will migrate to inhospitable climate zones**
 - **The new techniques & technologies for sustainable and environmental-friendly deposit's development will be needed (sleet proof stationary platform constructions, new materials for offshore area well drilling, etc.)**
 - **Nuclear and isotopic techniques and technologies as the competence and experience, accumulated by member countries during the nuclear technology's mastering open up great possibilities in many fields (materials, waste treatment, computer simulation, automation, energy supply, etc.)**
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