

Effective oil and gas sector management can be an adequate response to the current challenges to the energy security of Russia

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Abstract

The article describes the advantages and disadvantages of government regulation of subsoil use in the US, USSR and RF. An effective system of state regulation of subsoil use contributes to solving the basic problems of development of the oil and gas sector - production optimization and oil recovery factor maximization. Modern technological progress in improving the efficiency of development of hard-to-recover oil reserves and unconventional hydrocarbons fields, amplified by US claims to political monopoly of socio-economic development of the world community, defies RF Security and especially in the energy sector. Despite the immense natural energy resources, modern Russia is not able to give an adequate momentary response to these challenges because of the poor state of the oil industry. To remedy the situation the immediate modernization of oil and gas sector with transition (not in words but in deeds) to the innovative development is required. The latter should start with innovative design of field development. And this entails the whole chain of innovation and modernized actions: building new geological and hydrodynamic models, close to the natural conditions of the formation of deposits, creation of a new laboratory base of research in reservoir rocks, fluids, organic matter, new methods of laboratory research, petrophysics, wells survey, preparation to development design. And at the head of this complex the reformed systems of monitoring and rational subsoil use public management should stand. The goal - improving the efficiency of hydrocarbon fields development to optimize production and maximize oil recovery factor by oil and gas sector intellectualization. Science and practical reorganization of oil and gas sector management is offered.

Keywords

Advanced recovery methods, Energy resources, Fuel and energy complex, Hard-to-recover oil reserves, Reproduction of the mineral resource base, The oil and gas sector, The oil recovery factor, Unconventional resources, Well bottom zone treatment