



**National Engineering Centre  
of fuel and energy complex**



**MINISTRY OF ENERGY  
OF THE RUSSIAN FEDERATION**

**JOINT-STOCK COMPANY  
«National Engineering Centre  
of fuel and energy complex»  
(NEC FEC)**

**Moscow  
2016**

«.. REAL RESULTS IN BUILDING INNOVATIVE SOCIETY SHOULD  
BE THE MAIN CRITERION»

V. PUTIN



«... MAIN PROBLEM FOR INNOVATION - LACK OF  
COMMUNICATION BETWEEN DEVELOPERS AND CONSUMERS OF  
THESE PRODUCTS»

A. NOVAK

«... DEVELOPMENT OF ENGINEERING – AN IMPORTANT  
COMPONENT OF FORMATION INNOVATION IN RUSSIA»

D. MANTUROV





# RELEVANCE OF CREATION

## PROMOTION OF GOVERNMENT POLICY



**Create and development of innovative technologies** demanded by the energy complex in the short term



**Monitoring and supervision of the implementation** of innovative technologies and solutions from the R&D development stage up to the stages of commercialisation



**Comprehensive information and expert support** of the project activity



Formation of the **Center for International Energy and Industrial Cooperation**

**NEC FEC is a system integrator of the management system of innovation activities of the fuel and energy complex**



# NEC FEC

## EFFICIENT PUBLIC-PRIVATE PARTNERSHIP





**NEC FEC**

CONFIRMED INTEREST OF INDUSTRY



Ministry of Education and Science  
of the Russian Federation



The Ministry of Energy of the  
Russian Federation



Ministry of Economic Development  
of the Russian Federation





**AGENCY  
FOR STRATEGIC INITIATIVES**



**TEACHING CENTRE OF FEDERAL  
ANTIMONOPOLY SERVICE**



**WORLDSKILLS RUSSIA**



**FROST & SULLIVAN**



**BAUMAN MOSCOW STATE  
TECHNICAL UNIVERSITY**



**GUBKIN RUSSIAN STATE  
UNIVERSITY OF OIL AND GAS**



**INSTITUTE OF PETROCHEMICAL  
SYNTHESIS OF RUSSIAN ACADEMY  
OF SCIENCES**



**MOSCOW INSTITUTE OF PHYSICS  
AND TECHNOLOGY**





**RUSSIAN - QATARI BUSINESS  
COUNCIL**

**LLC «SBERENERGO  
DEVELOPMENT»**



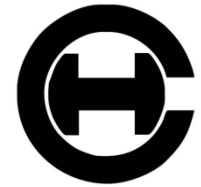
**RUSSIAN-AUSTRIAN  
BUSINESS COUNCIL**

**PREMIER CREDIT COMMERCIAL  
BANK INCORPORATED**



**RUSSIAN - CHINESE  
CHAMBER OF COMMERCE**

**UNION OF OIL & GAS  
PRODUCERS OF RUSSIA**





INDUSTRIAL COOPERATION



COOPERATION IN CONSTRUCTION

FULL PRODUCTION CYCLE ALLOWS US TO DEVELOP, PRODUCE AND INTRODUCE HIGH-TECH EQUIPMENT IN THE ENERGY INDUSTRY

INCREASE OF LOADING CAPACITY  
OF THE PRODUCTION FACILITIES

UPDATE OF MATERIAL  
AND TECHNICAL BASE

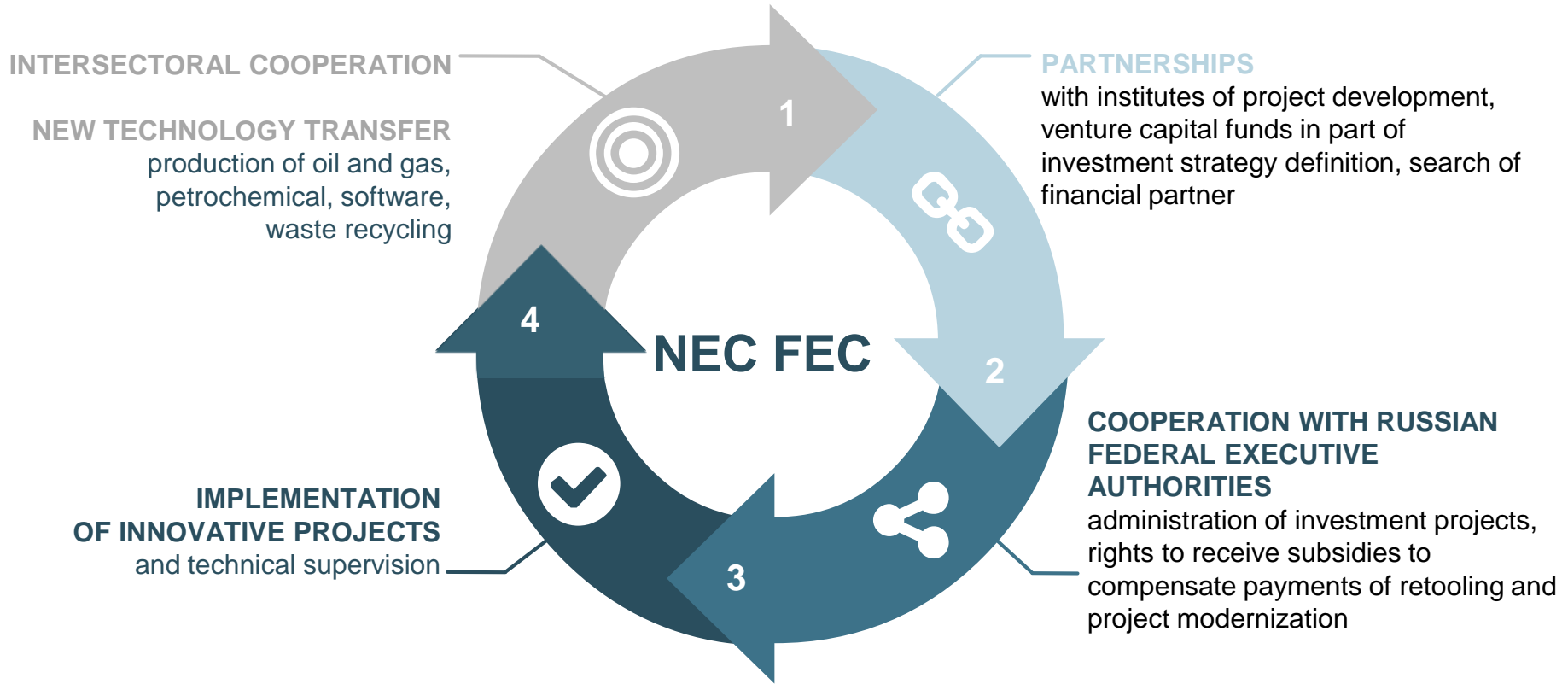
TURNKEY  
CONSTRUCTION & IMPLEMENTATION





# NEC FEC

## PROJECT MANAGEMENT SYSTEM



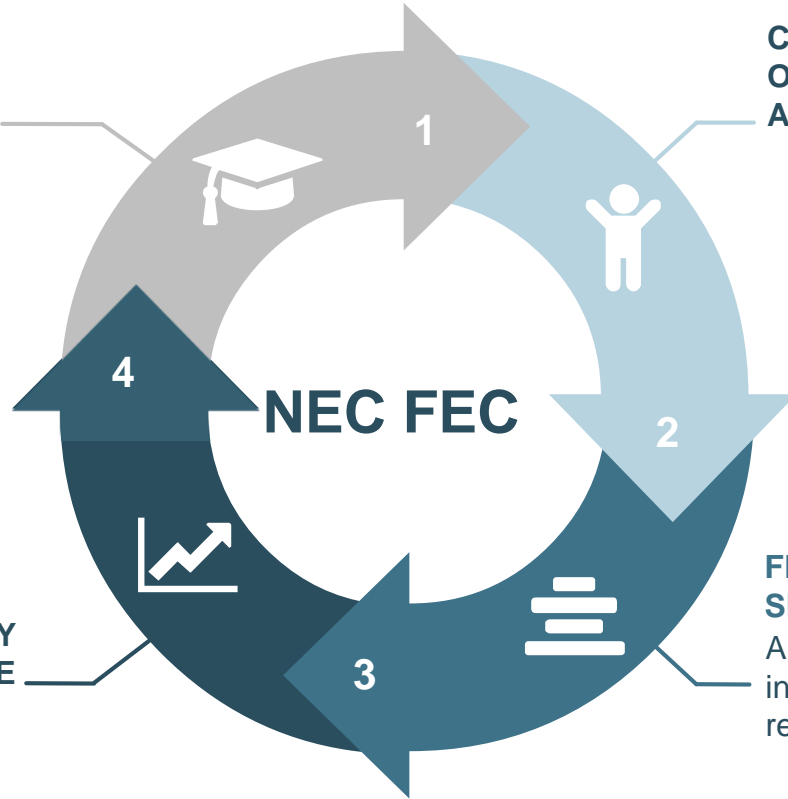


# NEC FEC

## PERSONNEL TRAINING



**INTERACTION WITH SCIENTIFIC AND EDUCATIONAL INSTITUTIONS**  
to monitor of the modern trends in a proactive staff training for high-tech manufacturing

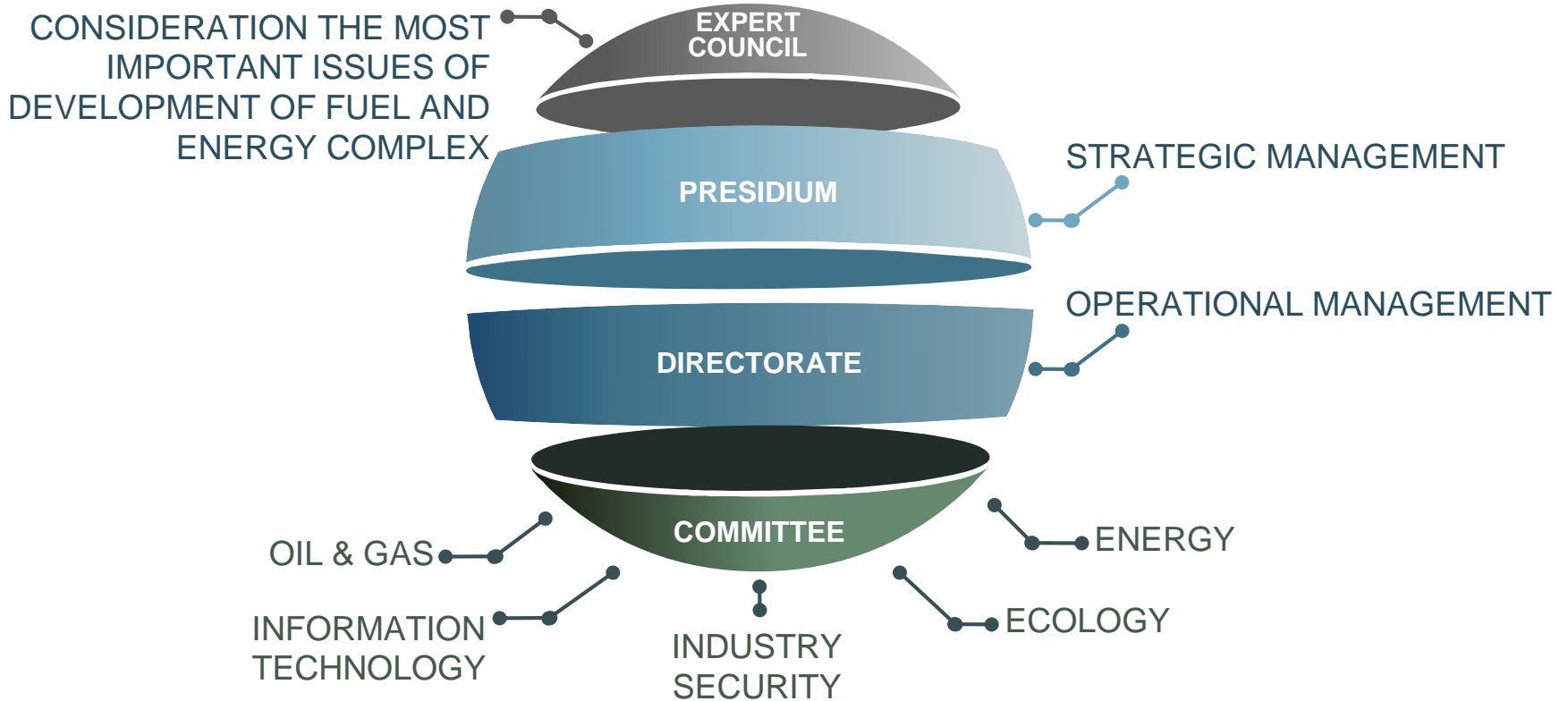


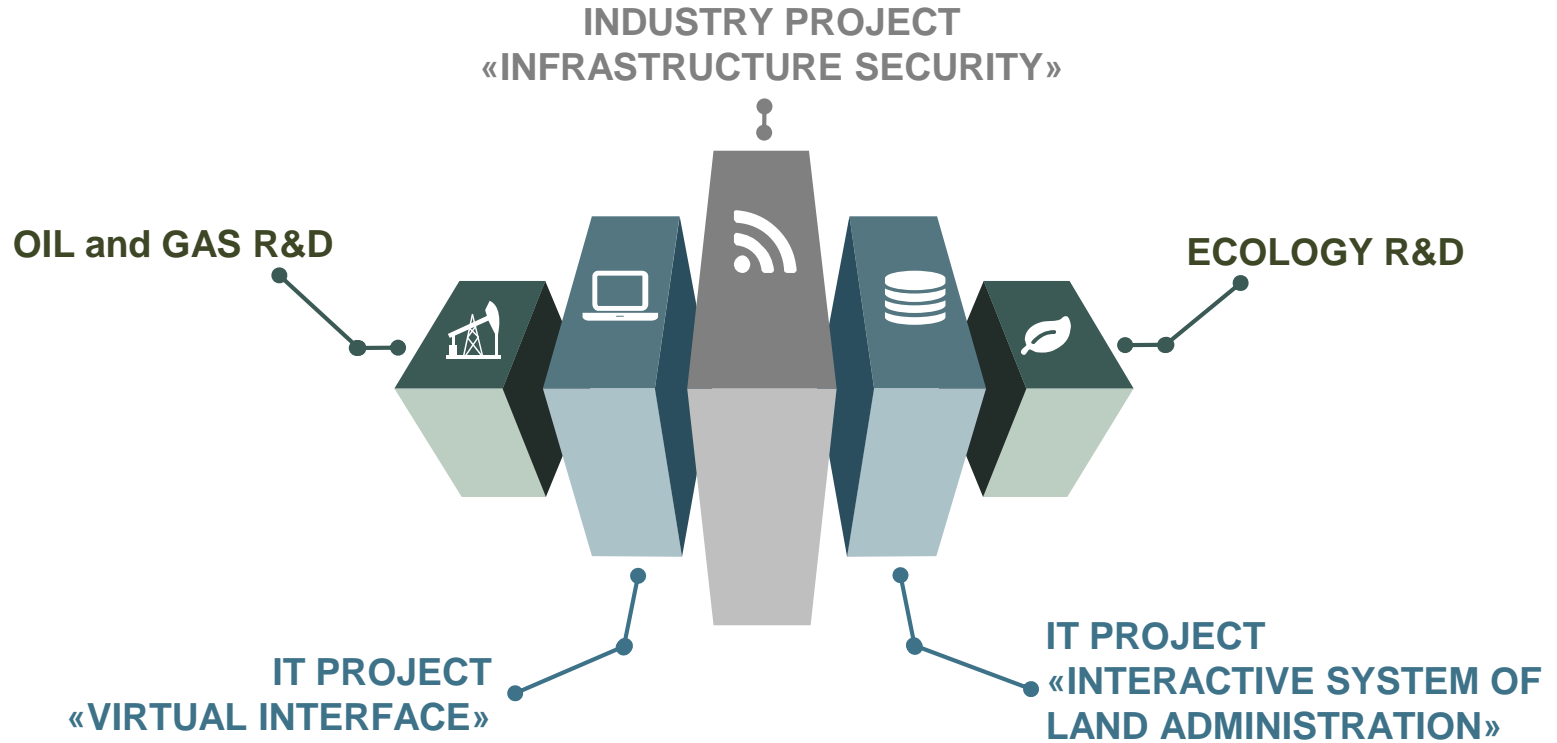
**CREATION OF PROFESSIONAL «HR ACTIVE»**



**FEDERAL ANTIMONOPOLY SERVICE, WORLDSKILLS RUSSIA**  
Actualisation of staff training of high-tech industries; professional training on the real fields of energy industry

**CONSOLIDATION OF HIGHLY SKILLED PERSONNEL RESERVE**







# NEC FEC

## FEASIBILITY OF THE PROJECT

- ✓ LEGAL SUPPORT
- ✓ ECONOMIC JUSTIFICATION
- ✓ PROJECT FEASIBILITY IN THE PUBLIC AUTHORITIES
- ✓ EXPERTS OPINION
- ✓ COPYRIGHT PROTECTION





### IT PROJECT «VIRTUAL INTERFACE»

Information interface of creating simulation models and simulation of industrial infrastructure with staff / emergency situations on the PC screen and in real 3D interface types of training personnel, emergency atypical situations to assess their behavior, skill, technology, motor skills

### IT PROJECT «INTERACTIVE SYSTEM OF LAND ADMINISTRATION»

The innovative system, based on real data and using information gathered by layer "map" and samples available, with the possibility of simultaneous operation of all enterprise services and unloading of the data

### INDUSTRY PROJECT «INFRASTRUCTURE SECURITY»

Advance hypersensitive vibroacoustic system for security of manufacturing. Detect and identify of objects with a spatial resolution of 10 meters. Suitable for perimeter protection of buildings, oil & gas pipelines

### INDUSTRY PROJECT OF WASTE UTILISATION

Innovative cleaning technology by non-thermal and non-biological removal of hydrocarbons from the sludge solids content in a wide range of water, oil and solid phases

## **TWO-STAGE TECHNOLOGY OF GASOLINE PRODUCTION FROM APG**

Russian technology of conversion of hydrocarbon gas (APG) to obtain high-value-added products

## **HI POWER Li-On BATTERY**

Competitive technology of energy storage systems for independent power supply and peak loads

## **TECHNOLOGY OF ADDITIVE PRODUCTION FOR OF OIL & FUEL OIL TRANSPORT**

The innovative technology allows to maintain the fluidity of oil at low temperatures

## **«ECO» PROJECT**

Unique technology to eliminate pollution of petrochemical profile.  
The innovative technology of bacterial and sorbent processing oil sludge contamination

**OUR PURPOSE:**

**INDUSTRIAL COOPERATION AND TURNKEY IMPLEMENTATION**

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**THANK YOU FOR ATTENTION!**

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