



Instruments for projects implementation aimed at increasing energy efficiency in Russian Federation

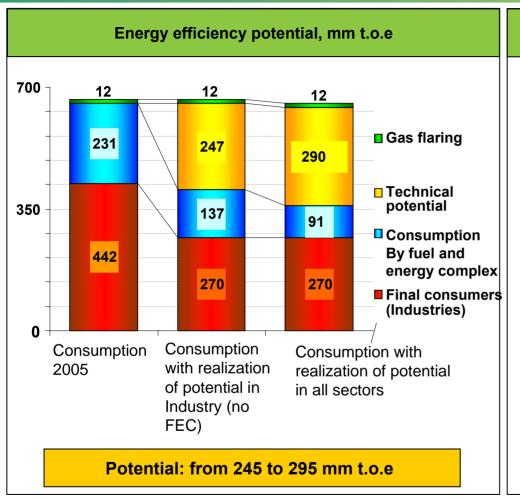
### **Vsevolod Gavrilov**

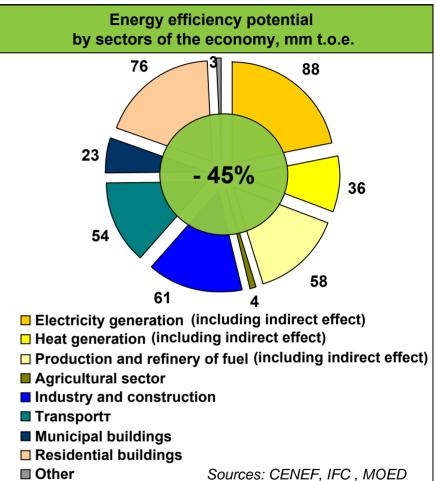
Department for energy efficiency and nature use project management Sberbank

Association of European Business 29 September 2009

### **Energy efficiency potential in Russian Federation**







- Energy efficiency potential is 45% form the total consumption of energy resources in 2005
- The main reserve of energy efficiency is located in Industry sectors- around 245 mm t.o.e.
- The indirect effect of utilization of energy efficiency potential at final consumers accounts for 1/3 of energy and fuel production (around 70 mm t.o.e.)
- Utilization of energy efficiency potential in Fuel and Electricity Complex would give extra 42 mm t.o.e

### Types of energy efficiency projects

Type I	Type II	Type III	
Energy savings potential: ~10%	Energy savings potential: ~60%	Energy savings potential:     ~30%	
Payback period: 1 - 2 years	Payback period: 2 - 4 years	Payback period : 5 + years	
Necessary measures:      Organizational measures,     Process optimization,     No energy waste,     Current equipment maintenance and renovation	Necessary measures : Investment projects aimed at construction of new equipment or blocks of current equipment	Necessary measures : Investment projects aimed at changing the technical architecture of the production facilities	
Subsidy necessity:	Subsidy necessity : Partial	Subsidy necessity :	

# Instruments for projects implementation aimed at increasing energy efficiency

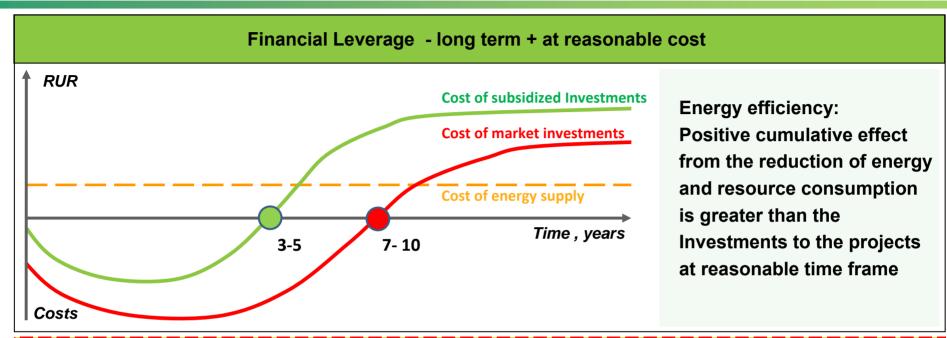


Instrument	Project design	Measures	Project type	Participants
Performance Contract	Optimization of operational activities of organization	<ul> <li>Organizational measures;</li> <li>Process optimization;</li> <li>No energy waste;</li> <li>Current equipment maintenance and renovation</li> </ul>	Type I Type II	1. Client – energy consumer  2. Energy service company (ESCO)  3. Bank - operator
Project Finance	Technical modernization of main production equipment or implementation of new generation technology facilities	<ul> <li>Consulting;</li> <li>Engineering;</li> <li>Procurement;</li> <li>Construction;</li> <li>Monitoring;</li> <li>Technical expertise</li> </ul>	Type II Type III	1. Investor – energy consumer  2. Integrated technical solutions – EPC/EPCM(O)  3. Technical agent  4. Bank - operator

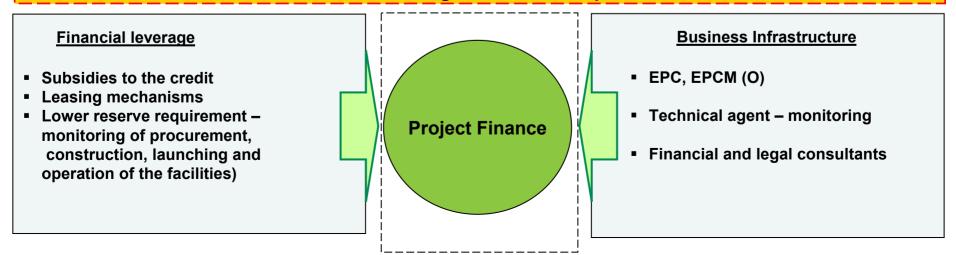
Financial Leverage and Integrated Technical Expertise – are main conditions for projects realization

### Financial Instrument: project financing – integrated business solution



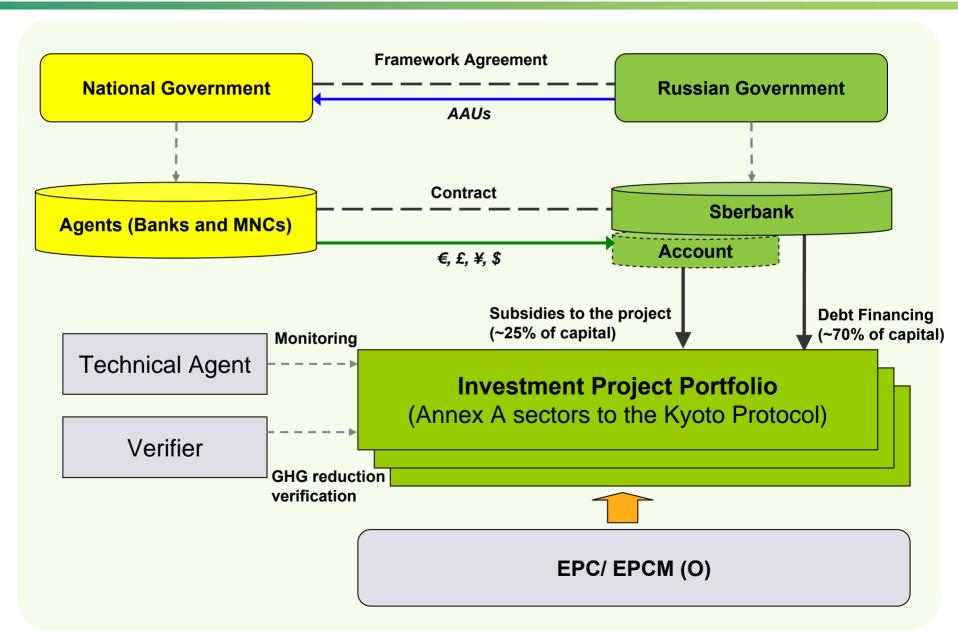


## Key conditions for project implementation – Financial leverage + Technical expertise



#### **Green Investment Scheme – financial architecture**







Department for energy efficiency and nature use project management Savings Bank of Russian Federation

Ladies and gentlemen, Thank you for attention!