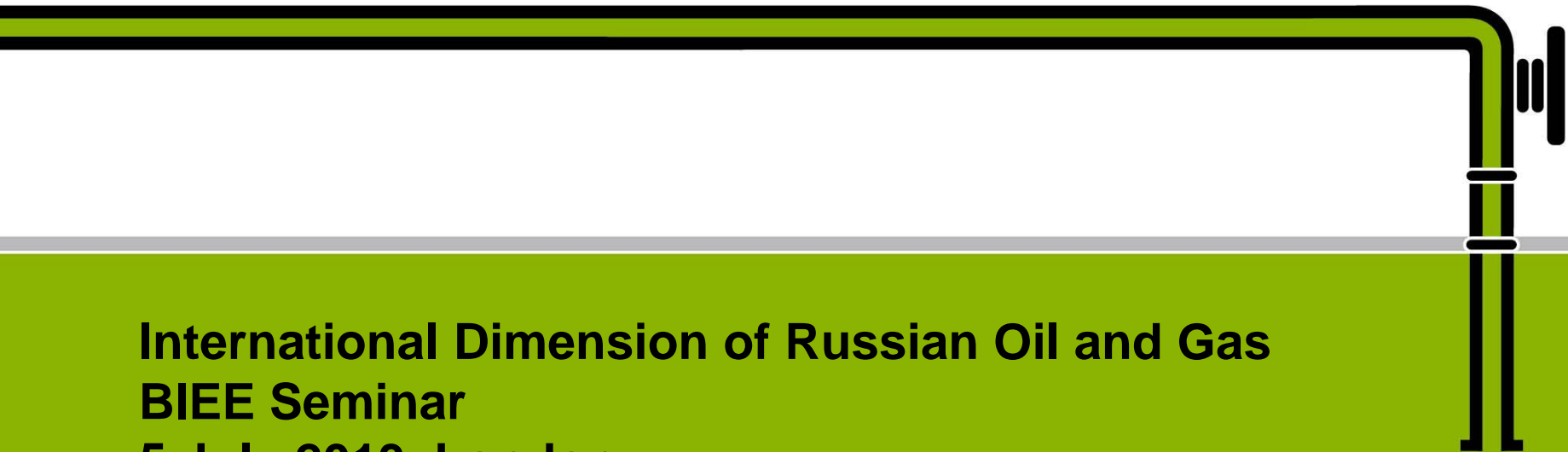




An Independent's View of Russia's Oil and Gas

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JKX Oil & Gas

International Dimension of Russian Oil and Gas
BIEE Seminar
5 July 2013, London



JKX Oil & Gas: British Independent with 20 Years of Experience in the Region



History

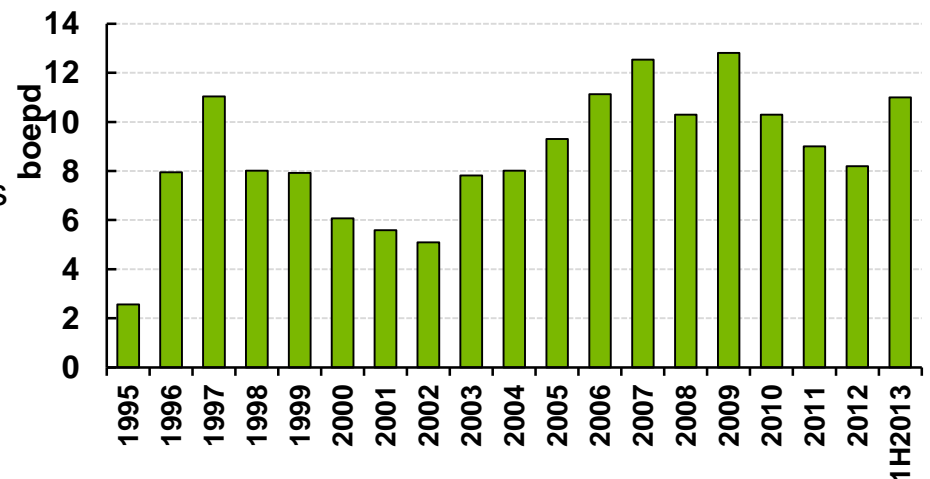
- **1994:** Poltava Petroleum Company created in Ukraine
- **1995:** IPO on London Stock Exchange
- **2005:** Entry into Eastern Europe
- **2007: Entry into Russia**
- **2011:** LPG plant launched in Ukraine
- **2012:** Russian production and sales begin
- **2013:** Planned production plateau achieved in Russia



JKX Oil & Gas production 1995-2013

Strategy

- Fully realize potential of Ukrainian licenses
- Maximize production from Russian asset
- Establish position in E.Europe
- Leverage experience to expand in area of operational focus



Russian Gas and Russian Oil: Two Different Stories... With Common Themes



Themes	Gas	Oil
Sector structure	<ul style="list-style-type: none"> Gradual decentralization (Novatek , Rosneft and other large oil companies emerge) 	<ul style="list-style-type: none"> New wave of consolidation (Rosneft+TNK-BP+?) New JVs with IOCs
Perception of future production	<ul style="list-style-type: none"> Abundance of new gas projects (while demand slows) 	<ul style="list-style-type: none"> Risk of decline after 15 years of growth
Government policy	<ul style="list-style-type: none"> Increasing tax take Evolving pricing policy Reviewing export strategy 	<ul style="list-style-type: none"> Some tax breaks for upstream ...while 'squeezing' refining
Common themes	<ul style="list-style-type: none"> Budget and GDP depend heavily on oil & gas Challenge of replacing cheap Soviet era 'inheritance' with new much more difficult to extract (and expensive) hydrocarbons Russian government and large Russian companies are the main protagonists with IOCs/NOCs in supporting roles 	

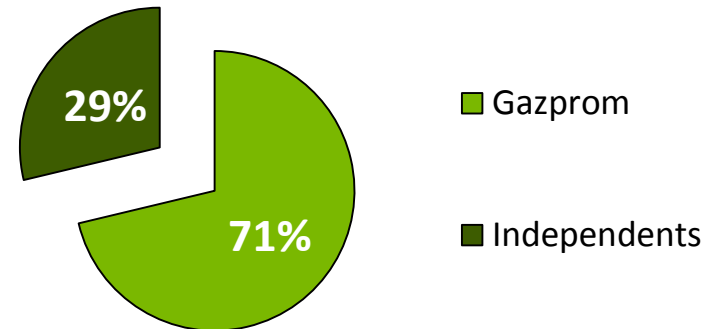
....Is there a role for independent E&P companies in gas and/or oil?

Small Gas Independents: A New Breed

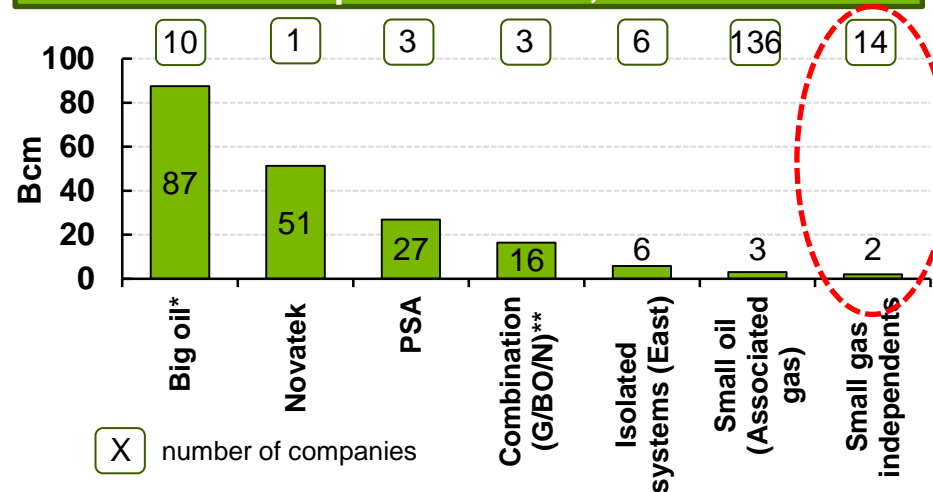


- Independent production close to 30% in 2012
 - 1998: 6%
 - 2003: 13%
- Small gas independents -- a relatively new phenomenon in Russia (0.3% of total production):
 - 14 companies producing non-associated gas
 - 11 companies in various stages of bringing small gas fields on line

Share of independent gas production in Russia in 2012



Distribution of independent gas production by companies in 2012, Bcm



Source: InfoTEK

*Includes Rosspan International and Tomskneft VNK

**Arcticgaz, Notgaz, Sibneftegaz

Koshekhabl'skoye Field



Background

- ❑ Redevelopment project (old Gazprom field)
- ❑ Reserves: 18 bcm (ABC1+2)
- ❑ Technically challenging:
 - ❑ Main target: Oxfordian (5,200m+)
 - ❑ Next target: Callovian (5,400m)
 - ❑ H₂S+CO₂

Highlights 2012-2013

- ❑ Initiation of production and gas sales
- ❑ Receipt of final Permit to Operate
- ❑ Ramp-up of production to plant capacity (420 mmcm/y)

Forward Program

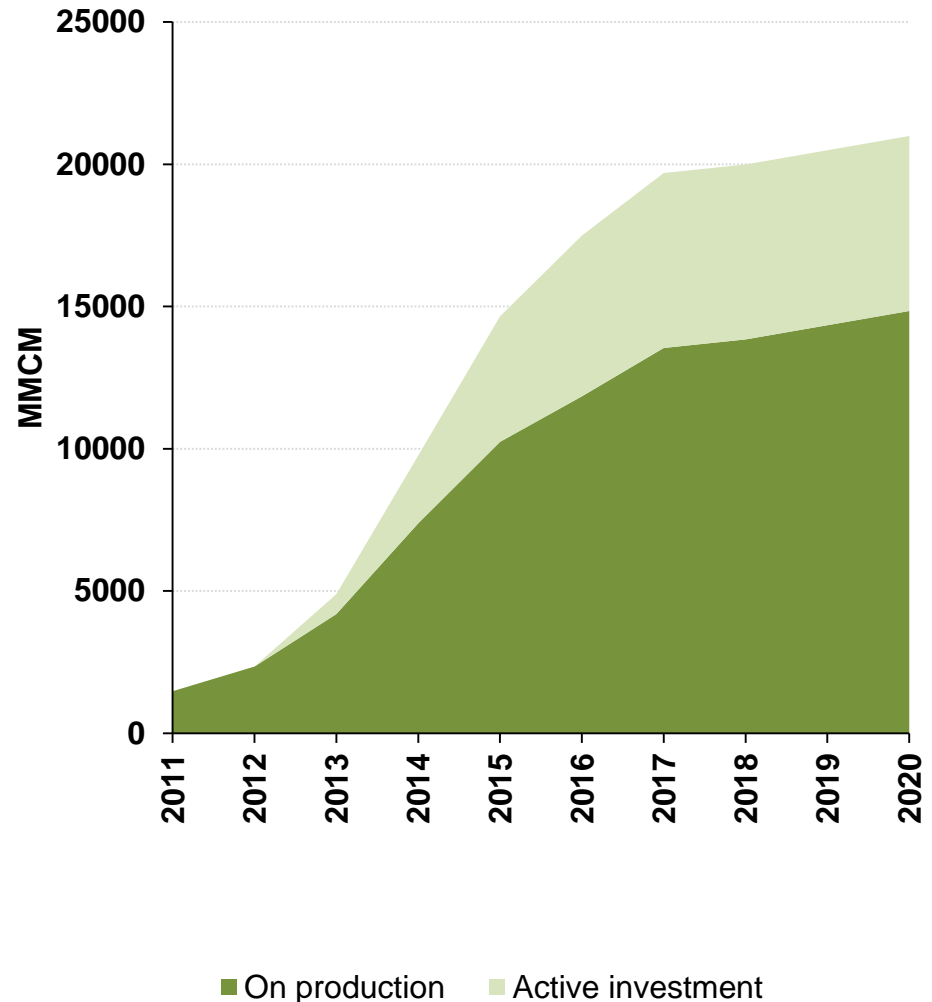
- ❑ Engineering of expansion project to increase plant capacity 50% (600 mmcm/y)
- ❑ Drilling down to confirm Callovian reserves by 2014
- ❑ Exploration at Georgiyevskoye neighbouring license (8 bcm of resources)



Considerable Potential of Existing and Planned Projects

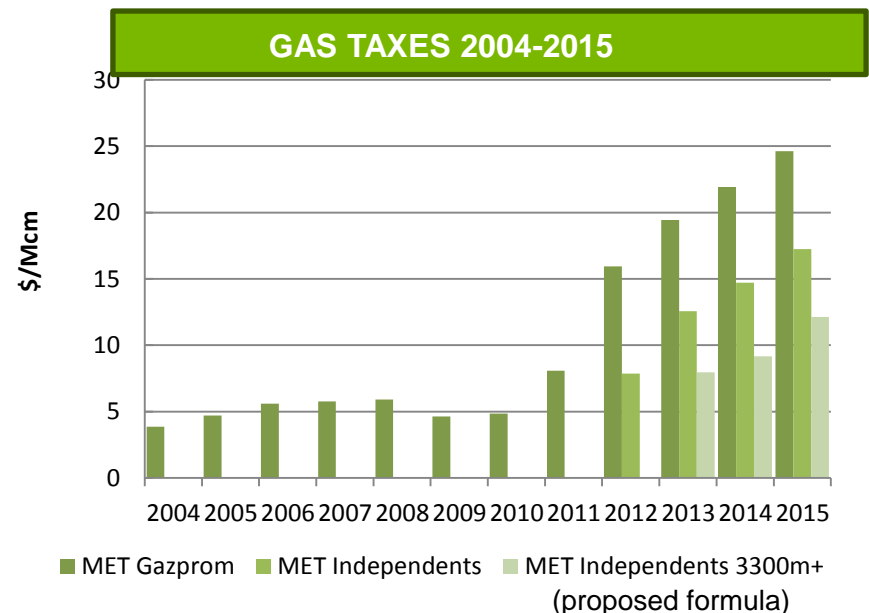
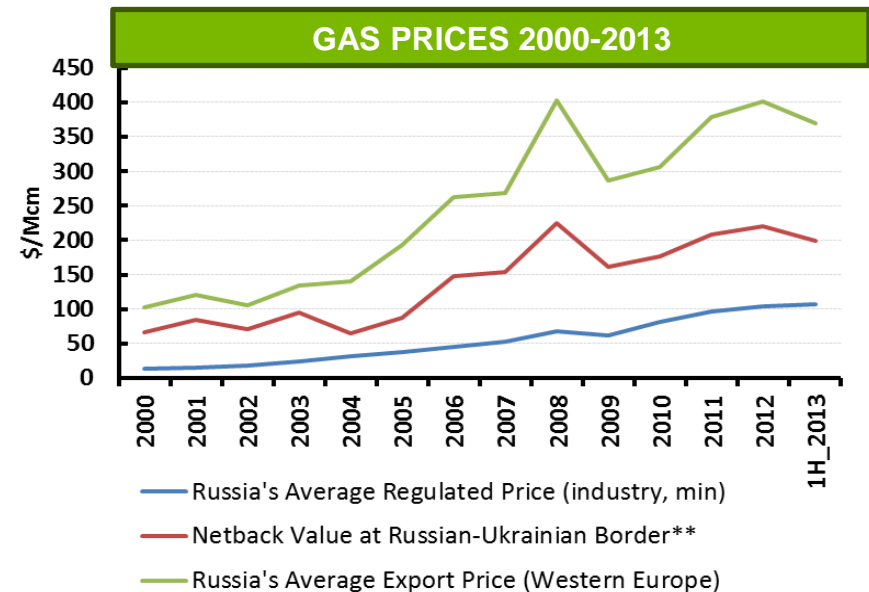
- Producers:
 - 14 companies
 - Total reserves: 470 bcm
 - Production potential 15 bcma
- Projects in active investment phase:
 - 11 companies
 - Reserves 130 bcm
 - Production potential 5 bcma
- Additional potential (1 tcm):
 - Undistributed fund
 - Small gas fields on the balance of big companies

Potential of small independent gas production through 2020



Russian Gas Prices and Taxes

- Growing domestic gas prices and expectations of 'netback parity,' key driver for development of independent gas sector
- But where will gas prices go from here?
 - Government rethinking domestic price policy
 - Increasing competition in the market (discounts offered to regulated prices)
- Gas taxation also increasing as government claims its share
- **Good news for (some) independents:**
 - Some projects and some regions may have lower than expected taxes due to differentiation (by depth)



Comparative Economics of Small Gas in Russia

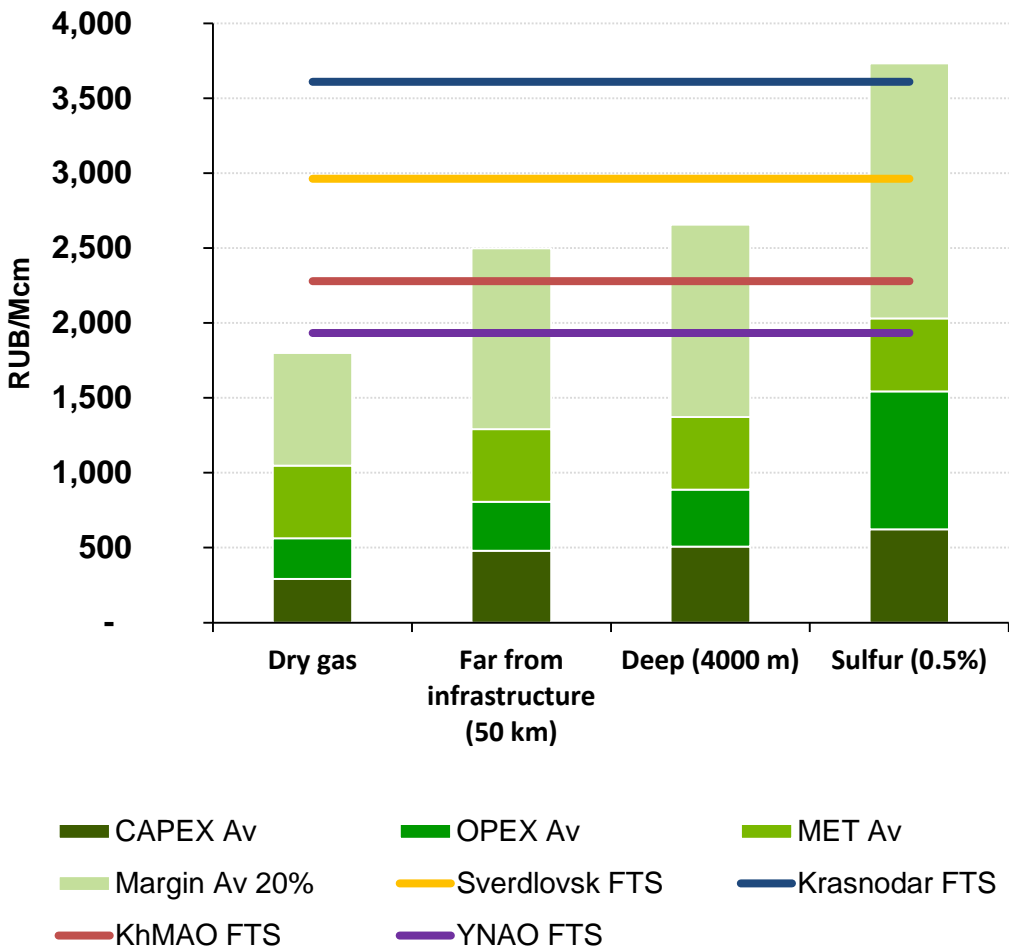
Assumptions:

- 5 bcma recoverable
- 400 mmcma plateau
- 20-year project life
- 10 wells
- 2000 meters deep
- MET R630/mcm in 2016
- No condensate

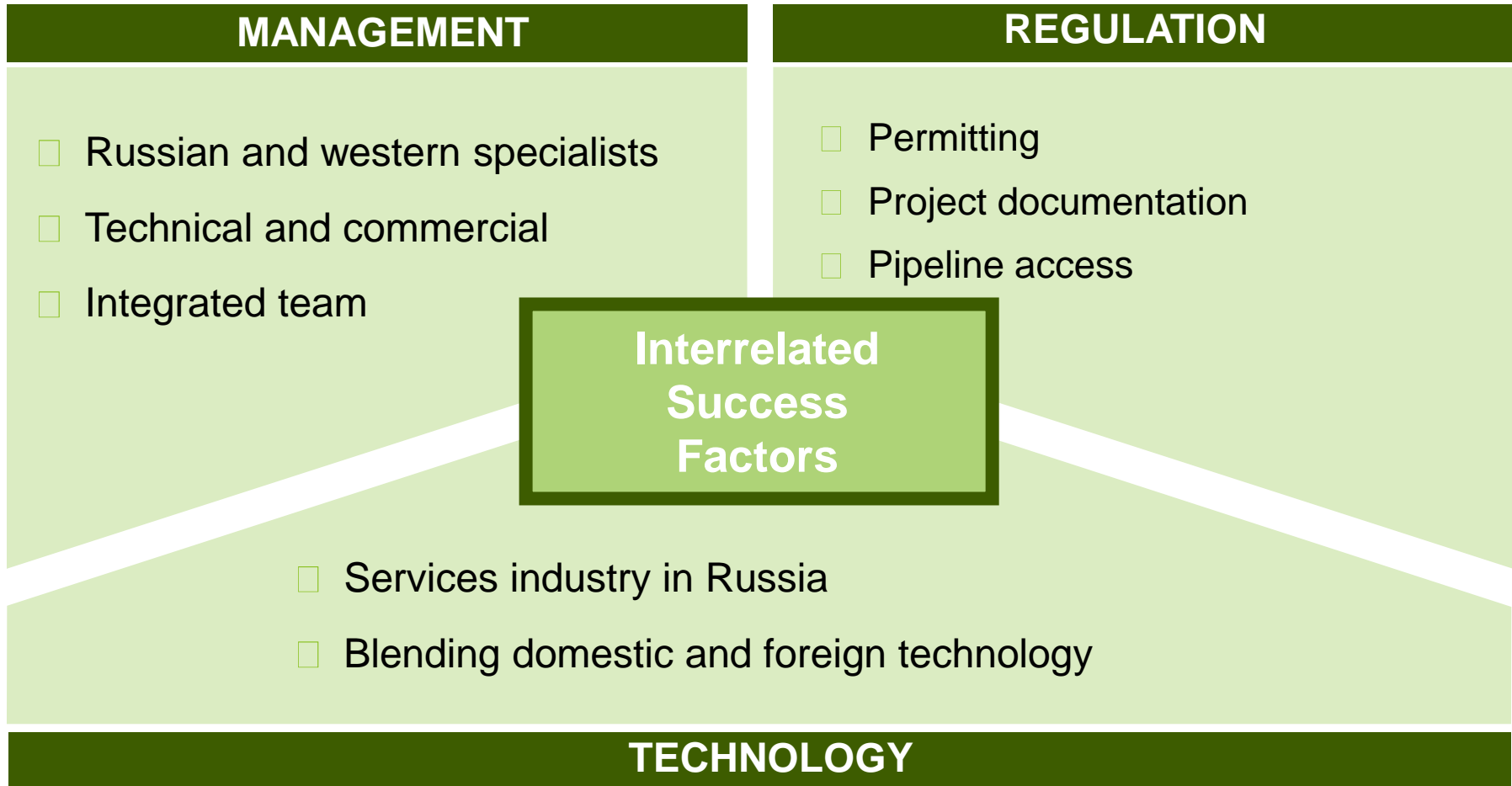
Results:

- Not all small gas projects will work everywhere in Russia
- Realized gas price very important
- Large increases in MET can severely limit potential
- Projects with H2S most at risk

Economics of small gas in Russia



Success in Large Part Depends on Organizational Capability



Conclusion



- Small E&P in Russia offers:
 - Easy access to small fields and broad choice of exploration licenses
 - Low reserve/resource valuations
 - Commercial advantages in specific projects/regions

- Challenges/Risks of investing in small E&P include:
 - Regulatory uncertainty (price and tax)
 - Financing options restricted
 - Operating environment geared toward large companies

- Benefits for Russia Inc:
 - Additional production (and tax revenue)
 - Regional development
 - Source of new ideas and technology