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Yamal peninsula – the giant of the future

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- How important is Yamal for Russia?
- What do we know about the present development activity?
- What is the outlook?







11 gas fields and 15 oil, gas and condensate fields discovered: 10.4 TCM

Miller: 360 BCM from Yamal peninsula by 2030, NPT – 140 BCM

Bovanenko, Kharasavey, Novy Port: 5.9 TCM

October 2006 – Gazprom board declares production start-up at Bovanenko in 2011

June 2009: Bovanenko start-up postponed to third quarter 2012



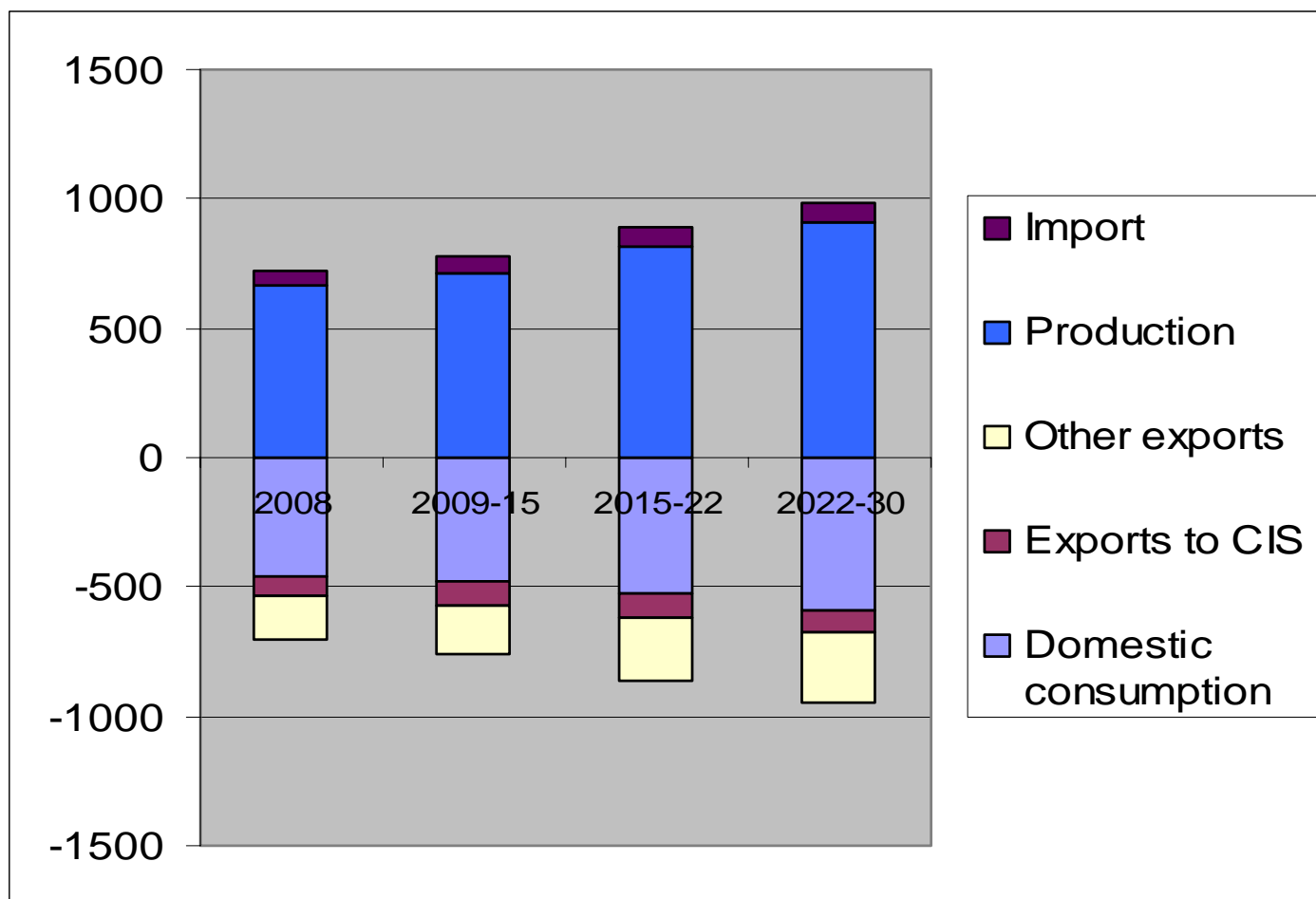
Yamal peninsula - Gazprom's checkpoint



- 1992 - Licenses for all fields where development had started given to Gazprom.
- 1998-2000 - new semi-independent players:
 - Itera, Rospan, Novatek, Tambeyneftegaz
- 2004-2009 - Reintegration with Gazprom
- 2008: Award of new licenses to Gazprom on Yamal, without competition
 - Kruzenshtern, Severo-Tambeyskoe, Zapadno-Tambeyskoe, Malyginskoe
- 80% of discovered reserves licensed



Official gas balance forecast...

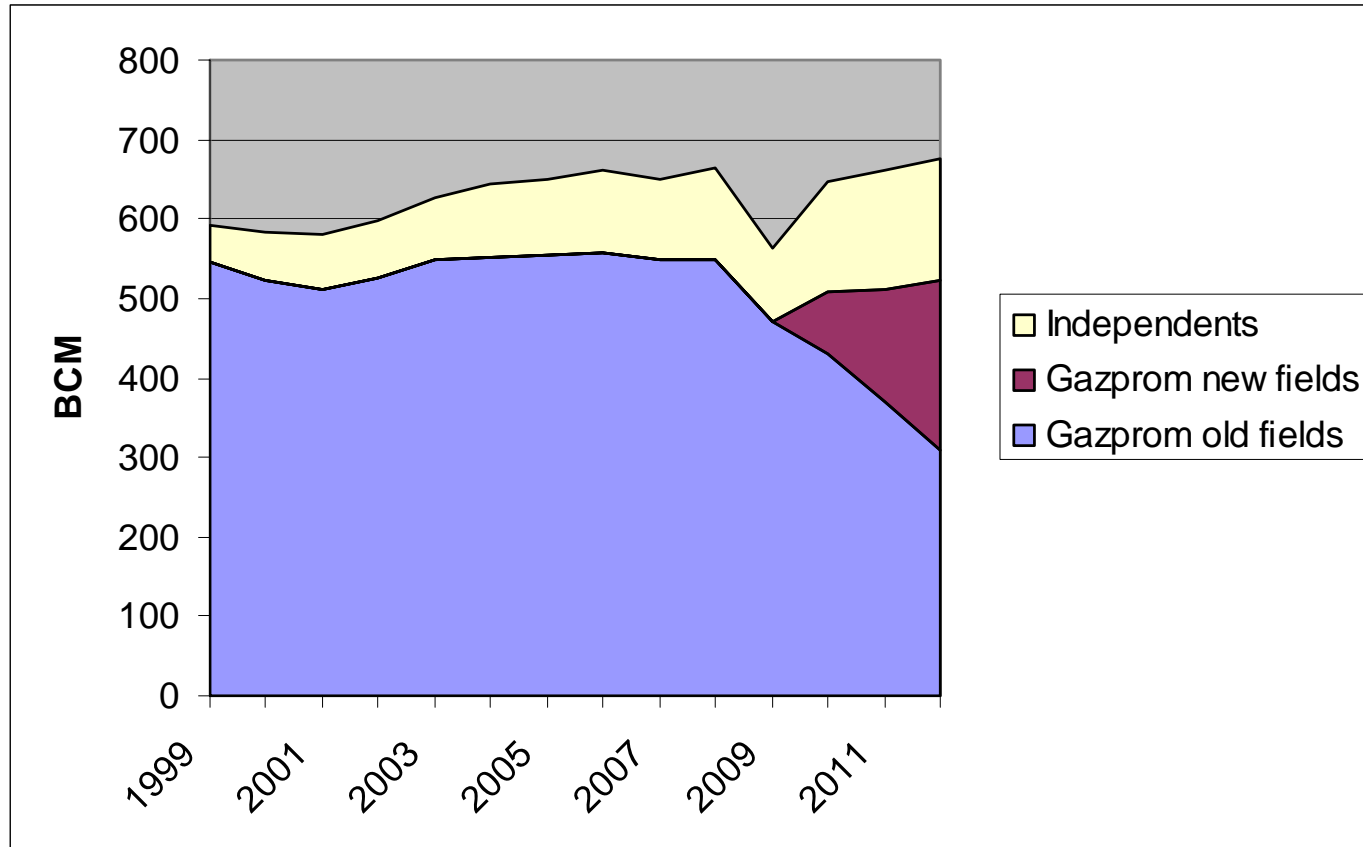


...more expansive than Gazprom's

Converted from "Russian energy strategy until 2030"



Even with revised consumption forecasts..



...there is need for new gas fields ... soon!



"Megaproject Yamal" - status

- Drilling of first production well December 2008
 - 94 wells planned before production start
- Pipeline status summer 2009
 - 300 km pipeline (of 1100 km Bovanenko-Ukhta) built
 - 40 km subsea (total 72 km)
 - Pipeline construction stopped?
 - Capacities moved to the Far East



Quiet?



- Введено в эксплуатацию
- Перспективные направления
- - - В стадии строительства (открыто рабочее движение)
- Газопровод
- Месторождения

Основные характеристики

Категория дороги	IV
Протяженность трассы	573 км
Количество станций	5
Количество развязок	12
Количество мостов	70
Общая протяженность мостов	12,4 км
Общий объем земляных работ	40,5 млн куб. м



Railway status September 2009:

- 472 km (of total 572)
- Planned finished in September 2010, too late for production start 2012?
 - Until then - only transportation by sea to Kharasavey and Sejakha July-September



Investment status

- Present estimate: USD 100 bill including Bovanenko Kharasevey, Novy Port + pipeline
- Nobody knows the real investment needs
 - “Complex development programme” only in 2010!
- Gazprom has had problems paying suppliers - starting 2008
- Sharp fall in export earnings put question mark on financial capacity of Gazprom
 - Announced cut 2009: 30% of original capital investment programme
 - Announced cut 2010: 50% of prognosticated investments



Government support

- Has the Russian government considered the implications of the combined privileges given to support Gazprom's development of Yamal?
 - Privileged access, semi-monopoly
 - Avoiding increased mineral tax on gas production
 - Reduced export tax?
 - Special economic zone?
 - Transfer of railway to RZhD
 - Direct state investments?
- Financial crisis makes it difficult for authorities to give further concessions



Outlook

- Bovanenko further delayed
 - Original scheme 75-115 BCM after four years
 - New scheme: 115-145 BCM (6-8 years?)
- Force output from Zapolyarnoe
 - From 100 -130 BCM
- Offshore fields in Ob bay – postponed
- LNG from Tambey group new priority – why?
 - With foreign capital and participation
- Yamal peninsula will be developed but the concrete priorities not decided yet
 - Configuration of interests not settled!

