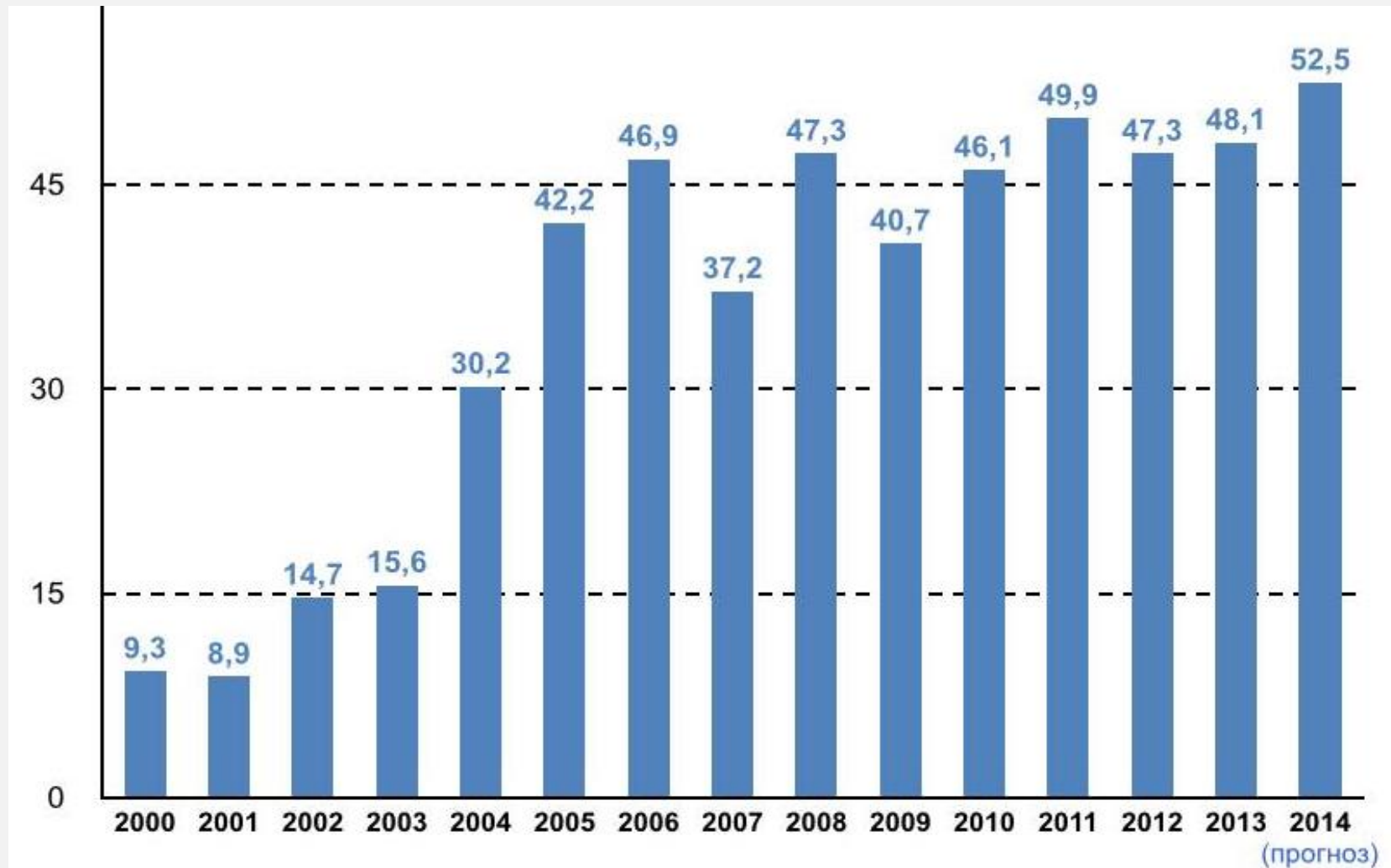


Russia's oil and gas industry: Where is it heading?

**Mikhail Krutikhin
RusEnergy**

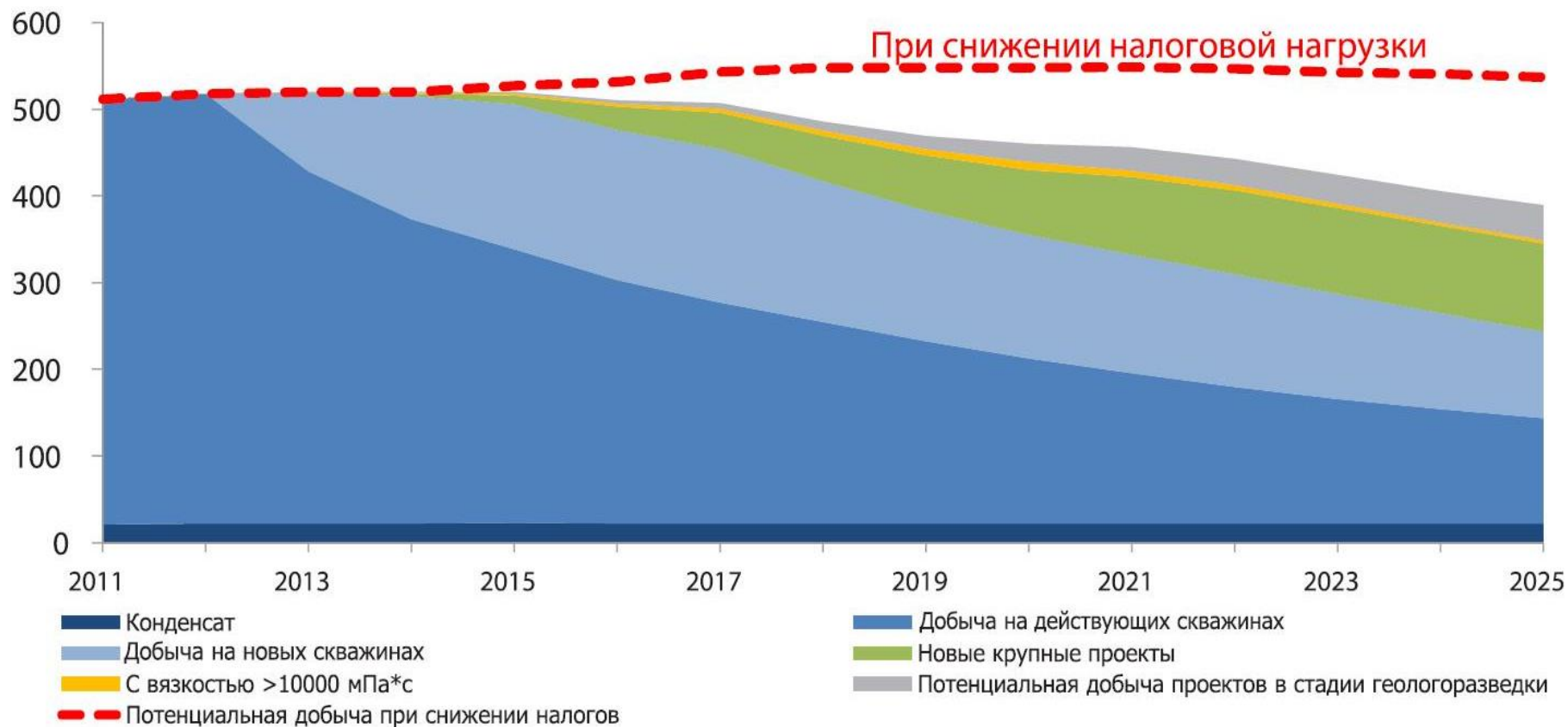
Oil and gas revenues in Russia's federal budget, %



Russian oil production is past peak

- **Size and quality of new discoveries deteriorates**
- **Ongoing projects enter depletion phases**
- **Tight reserves are a challenge for existing technologies**
- **Tax incentives are inadequate; PSAs are banned**
- **Industry is dominated by inefficient state-controlled majors**
- **Foreign operators are discriminated**
- **Western sanctions are in effect**

Oil production decline is predicted at 15-20% by 2020



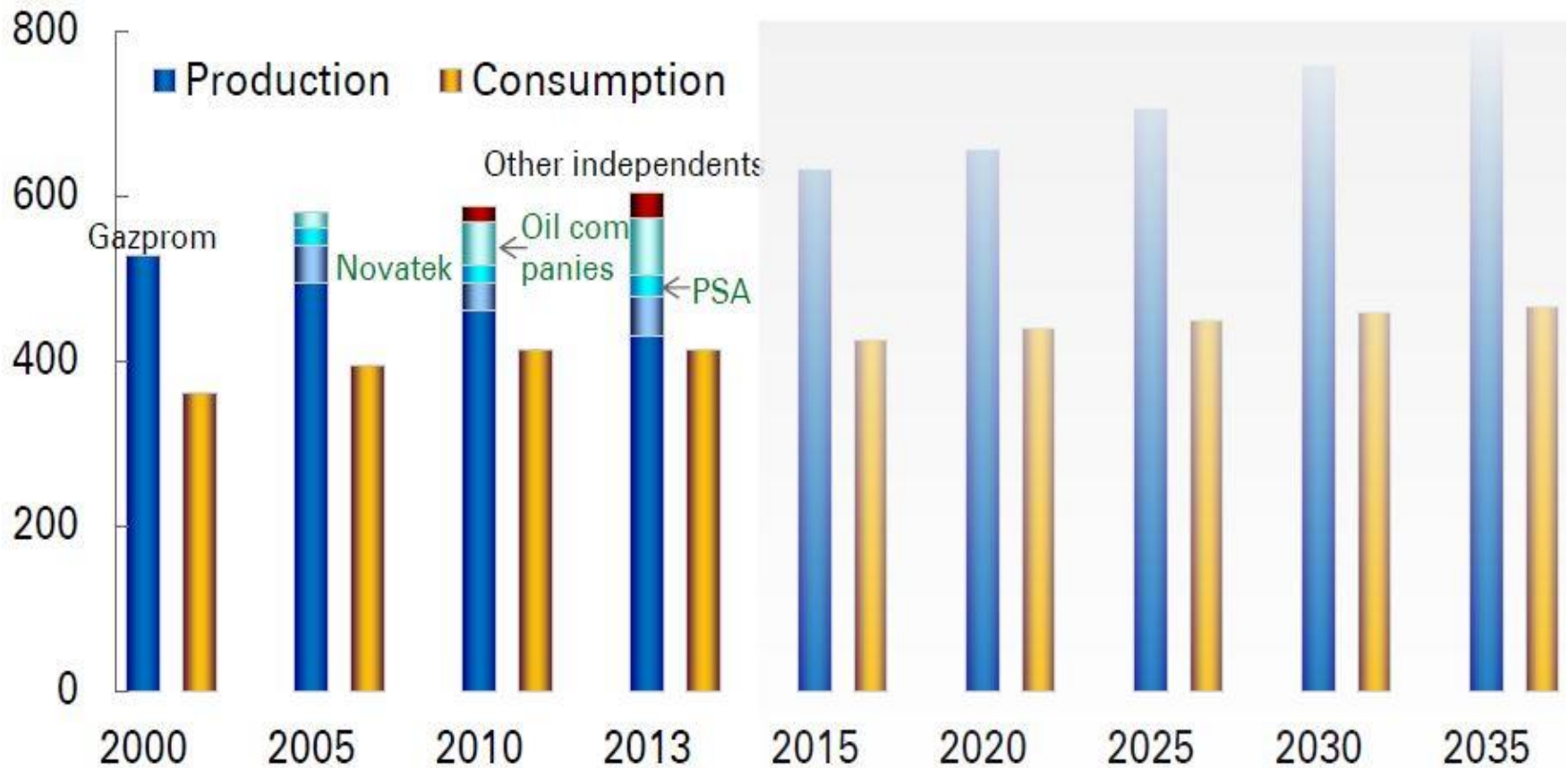
Russian oil supply a cause of concern for the EU

- **Production is growing slower than eastward export capacity is being increased**
- **Russian oil is sold at a premium in Asia**
- **Redistribution of flows is expected**
- **Some European clients may see their intake of Russian oil diminishing**
- **Quality of Urals blend is deteriorating**

Gas production growth is also an issue

- **Ongoing projects suffer from depletion and low pressure**
- **Production and transportation costs grow**
- **Domestic consumption is in stagnation**
- **The US shale revolution makes an impact**
- **Russian LNG is hardly competitive**
- **Demand for Russian gas in Europe is not growing**
- **China's gas market can do without Russian supply**

Natural gas balance estimate in Russia, Bcm



Source: BP Energy Outlook 2035

Can Russian gas remain a political weapon?



Russia's aggressive attitude in Europe

- Demanding a monopoly role for Gazprom
- No reciprocity
- No win-win solutions
- Insistence on high oil-indexed prices
- Third Energy Package is 'a very harmful document' (Putin)
- Huge redundant politically-motivated pipelines

The rationale of this approach?

- High and sustainable energy prices (not any more)
- Misinformation
- Incompetence of management
- Friendly contractors' pecuniary interests

Russia's aggressive attitude in Europe



October 23, 2012

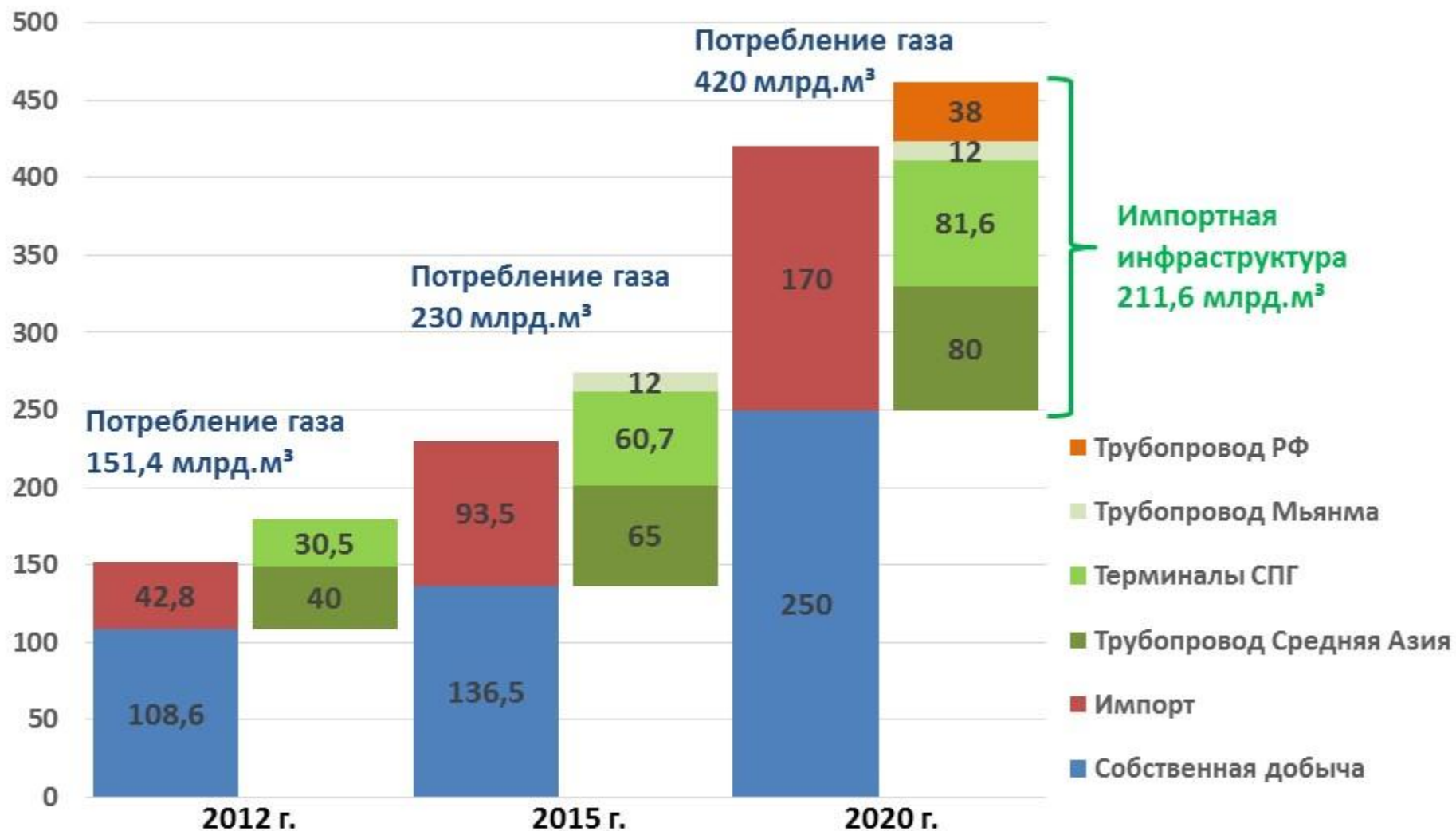
Sudden revelations of Putin:

- Shale gas is not a 'Hollywood movie'
- Gas prices are not growing
- Oil indexation becomes unpopular
- Russian LNG plans are in limbo
- China doesn't need Russian gas
- Russia has only one export market left for its gas, and this market is... Europe
- And 'hostile' Europe is not increasing gas demand

New radical attitude

- **Redrafting 'General Scheme of Gas Industry Development through 2030'**
- **Redrafting 'Eastern Gas Program'**
- **Acceleration of projects targeting Asia Pacific markets**
- **Upstream in Yakutia (Chayanda)**
- **Upstream in Irkutsk (Kovykta)**
- **Upstream at Sakhalin III**
- **Gas processing on the Amur River**
- **LNG plant and terminal near Vladivostok**
- **Connecting pipelines**

Прогноз роста газопотребления Китая и планируемое развитие инфраструктуры для импорта природного газа, млрд.м³



Источники: CNPC, Министерство природных ресурсов КНР, ЛУКОЙЛ, Oxford Institute of Energy Studies

**Instructions are issued.
Investment decisions are being made.
What about costs?**

- **Eastern projects are expensive and mostly non-economical**
- **Gas sales to Asia Pacific countries will probably have to be heavily subsidized by the Russian government**
- **Gazprom's annual investment budget till 2018 has to be doubled**

**Which cost items might be victimized?
Will South Stream be abandoned?**

Conclusions:

- **Russia's oil and gas production faces challenges and is expected to decrease significantly.**
- **Russia's economy has weak prospects for growth and seems to be shrinking.**
- **It is going to affect Russia's global role and domestic situation.**
- **What strategy the government may choose to steer the nation to a brighter future?**



Three possible scenarios for Russia

- **Integration into the Western civilization politically and economically; opening to international capital, technologies, democratic principles, liberal market, private business, transparency, etc. (Norway, Singapore, etc.)**
- **Cold war attitude on the verge of a real war; a totalitarian regime, mobilization economy, political oppression, etc.**
- **Transformation into a Chinese colony.**

What's going on?

- **Creeping de-privatization, which means nepotism, corruption, inefficiency, waste of public wealth. A crony capitalism.**
- **Xenophobia under patriotic banners instead of international cooperation and integration.**
- **Attempts to subjugate former Soviet republics politically and economically (mostly futile).**
- **Manual control ('vertical of power').**
- **Cold war rhetoric. Boosting military and law-enforcement budgets.**
- **Teaching other nations what they must do to accommodate Russia's plans.**

The outcome may be disastrous.
The big question is:
What is the West going to do vis-à-vis this
Russian attitude?



Thank you

Mikhail Krutikhin
crane21@gmail.com