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Energy Sectors, History and Economic Development in Post-Communist European Countries

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Specific features of individual sectors

- Oil
    - globally traded
    - different means of transport (pipelines, sea lines)
    - storability
- Gas
    - Rigid infrastructure
    - Partitioned market
- Implications for the region?
- Oil-related concerns effectively mitigated in the past (Druzhba outage as a proof – see further)

Energy commodities and IR – the case of CEE

- From geopolitical perspective, gas sector as the most impactful commodity
- Suppliers traditionally relied on specific principles to cement the market control
  - long-term contracts (economic logic aimed at cost return)
  - prohibition of gas re-selling
  - control over infrastructure
  - (oil indexation as a traditional practice in the sector – as a consequence of a limited gas trade)
- Gas as a “new” commodity (from mid-20th century), by-product of the oil sector
- As a result, suppliers were able to secure long-term relationships and calculate viability of their investments
  - stable & predictable environment for the supplier
  - partitioned market
  - applies to gas sectors globally

Natural Gas - How it all began

- Centrally-planned Soviet economy as the key precondition to procure the immense task of building the infrastructure
- Recovery of oil industry after WWII (gas as a by-product at the outset)
- Successful gas exploration in 1950s,
- Growing production through 1960s (as a standalone industry)
- USSR lacked technologies (casting and welding) to construct reliable pipelines
  - Higher pressures in gas pipelines (X oil)
  - German and Italian pipe shipments to the Soviet bloc
- 1960s – Europe in need of energy supplies
- 1962 – NATO countries embargo on large-diameter pipes (oil but also gas pipeline building hampered)
  - missing unity, disputable effect
- 1964 – agreement on the Brotherhood Pipeline between USSR & CZ
- 1967 – put in operation

Natural Gas - How it all began

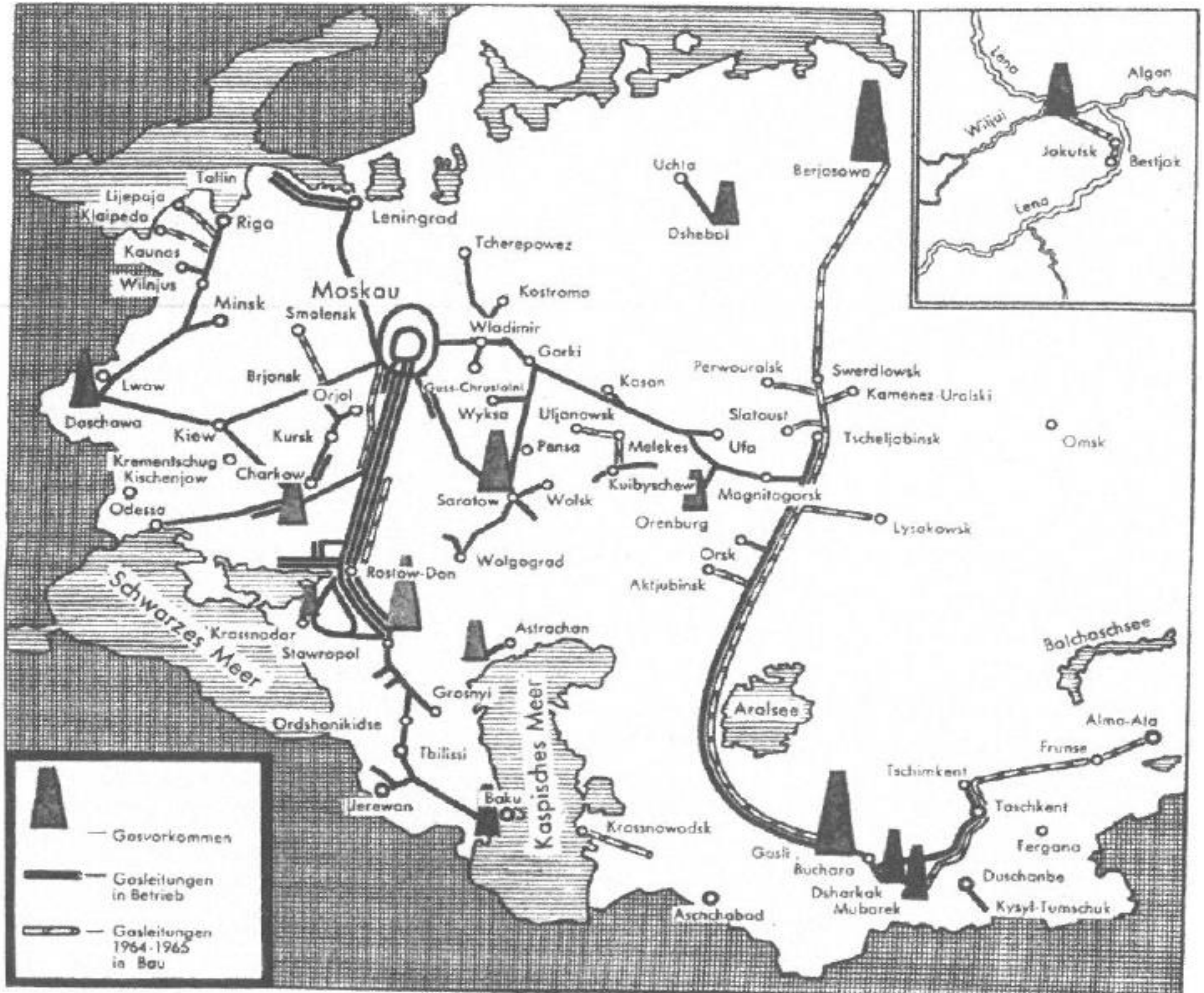
- Continuation of the cooperation despite the 1968 invasion of the CZ
- Western Europe as a target of the Russian supplies
- Supplying the West as a way of ‘showcasing’ achievements of communism and a way of getting hard (western) currency
- Counterbalancing the US economic influence in (western) Europe
- Strong adherence to contractual obligations (!)
- First deliveries to the Soviet republics on the border in late 1950s (Georgia, Armenia) and early 1960s (Belarus, Latvia, Lithuania)
- First deliveries to the W. Europe in early 1970s
- Building on the momentum gained during the construction of the oil pipeline (Druzhba)

Facilitating factors

- Oil shock(s) highlighted the need for oil alternatives
- Détente, Ostpolitik – W. Brandt
- Cooperation with Italy in industrial production (car industry)
  - Production of VAZ – 2101 based on Fiat 124
- Italian pipes for the Soviet oil - Italy later replaced by Austria as the closest partner
- Dominance of economic considerations and reasoning
- Russian domestic consumers competing with (prioritized) supplies to the West
- Russian supplies opposed for ‘unfair pricing’ (X nowadays)
- Heated debate
  - Should geopolitical factors be considered?
  - Is economic dependence dangerous?

Pulling it together

- Enormous task in terms of logistics and engineering
- Gas sources in the Eastern Ukraine played much greater role than expected
  - to cover the supply gap until the Siberian sources were developed
  - Western Ukraine transformed from a producing region to a transit corridor and (later) storage area
  - Key role of Czechoslovakia – the Transit Pipeline (gradually expaneded to 80 bcma until 1990s)
- Prioritizing exports caused initial domestic shortages in Russia
- By 1975 all Russian satellites were connected (except for ROM)
- Russian gas imports were not dominantly perceived as politically threatening
  - rather, the technical reliability emerged as an issue
- W. European gas fields were getting depleted (X Groeningen) – demand for the Russian gas was growing
- Attractivity of the Russian gas increased even more in the aftermath of the 1st oil shock


Lena
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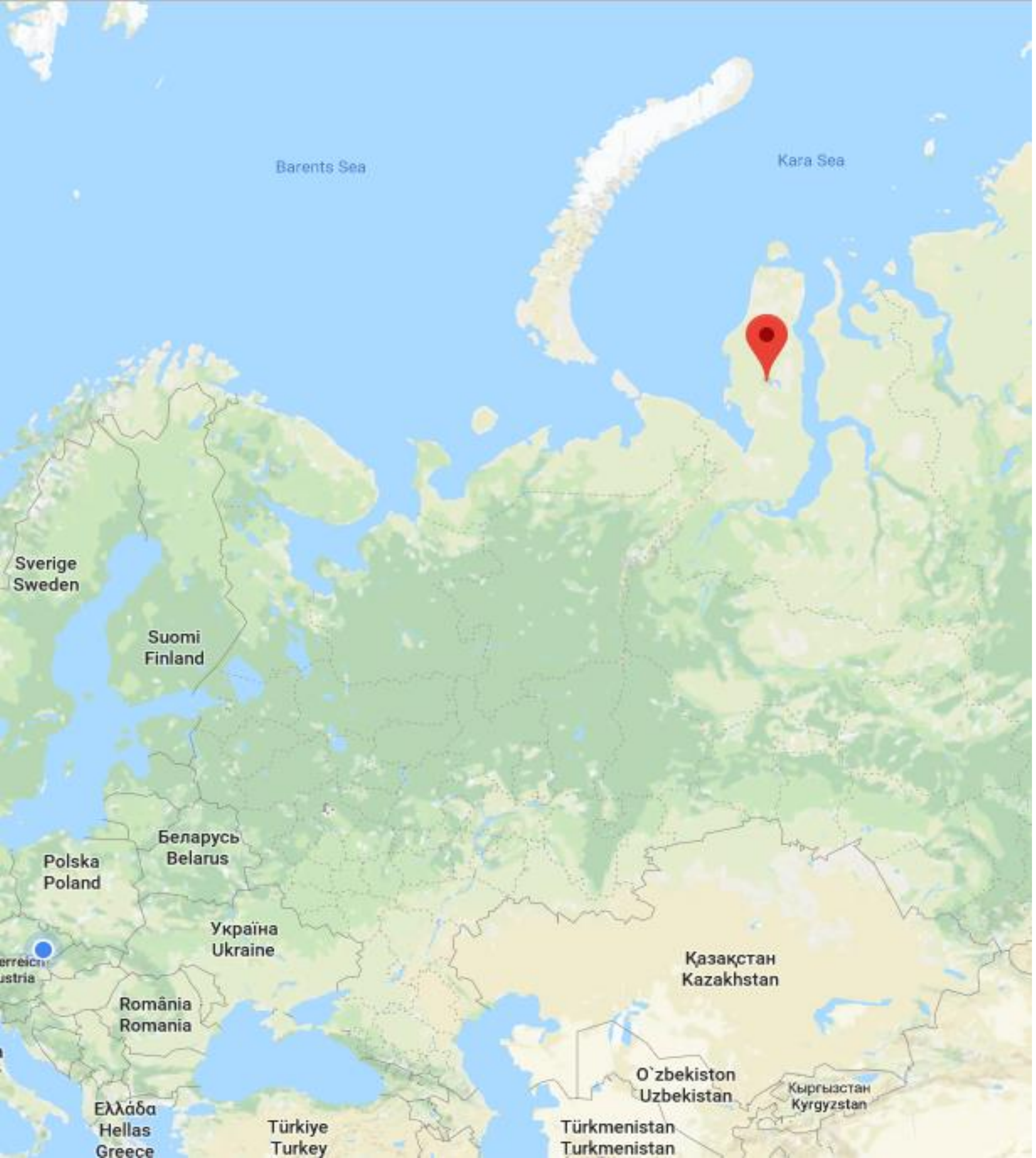
Moskau
Smolensk
Tcherepowez
Kostroma
Wladimir
Gorki
Uchta
Dshebol
Berjosowa
Brjansk
Orjol
Lwow
Daschawa
Kiew
Kursk
Krementschug
Kischenjow
Charkow
Odessa
Guss-Chrustalni
Wyksa
Uljanowsk
Pensa
Kasan
Melekes
Kuibyschew
Saratow
Wolsk
Wolgograd
Rostow-Don
Perwouralsk
Swerdlowsk
Kamenez-Uralski
Slatoust
Tscheljabinsk
Ufa
Magnitogorsk
Omsk
Orenburg
Lysakowsk
Orsk
Aktjubinsk
Schwarzes Meer
Krassnodar
Stawropol
Astrachan
Grosnyi
Ordshonikidse
Tbilissi
Jerewan
Baku
Kaspisches Meer
Krassnowodsk
Aralsee
Balchaschsee
Alma-Ata
Frunse
Tschimkent
Taschkent
Fergana
Gasli
Buchara
Dsharkak
Mubarek
Duschanbe
Kysyl-Tumschuk
Aschchabad
Gasvorkommen
Gasleitungen in Betrieb
Gasleitungen 1964-1965 in Bau

Cementing the partnership

- In late 1970s, idea of a new pipeline dedicated exclusively for transit to the West was introduced
  - Tapping into the Yamal gas resources
- Iranian revolution halted the deal on gas supplies (IGAT2 pipeline)
- Europe prompted Russia to proceed with the increase of the export capacity to Europe
- Rise of gas prices in the aftermath of the 2nd oil shock
- Radical change to the established suit – US (under Reagan) opposing the deal
  - 1981 - (failed) embargo on the US-produced parts used in compressors needed for making the pipeline (lifted in 1982)
- Expanding the capacity – Urengoy-Uzhorod pipeline – put in operation in 1984
- Yamal Europe put in operation in 1999


Barents Sea
Kara Sea
Sverige
Sweden
Suomi
Finland
Polska
Poland
Беларусь
Belarus
Україна
Ukraine
România
Romania
Ελλάδα
Hellas
Greece
Türkiye
Turkey
Қазақстан
Kazakhstan
O`zbekiston
Uzbekistan
Türkmenistan
Turkmenistan
Кыргызстан
Kyrgyzstan


KARA SEA
Yenisey Gulf
Krasnoyarsk Territory
Malyginskoye
Rusanovskoye
Tambeyskaya Group of Fields
Leningradskoye
YAMAL
PENINSULA
Kharasaveyskoye
Bovanenkovskoye
Severo-Kruzenshternskoye
Rostovtsevskoye
Yamburgskoye
Zapolyarnoye
Urengoyskoye
Yuzhno-Russkoye
Baidarata Bay
Novoportovskoye
Ob Bay
Novy Urengoy
Medvezhye
Yubileynoye
Vorkuta
Nenets
Autonomous
Area
NADYM-PUR-TAZ REGION
Nadymskoye
Yamsoveyskoye
Komsomolskoye
Yety-Purovskoye
Nadym
Salekhard
Vyngayakhinskoye
Muravlenkovskoye
Novogodneye
Yamal-Nenets Autonomous Area
Komi
Republic
Khanty-Mansi
Autonomous Area – Yugra
RUSSIA
Nizhnevartovsk
Surgut
Nefteyugansk
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Gas pipelines in operation
Fields

Primary Russian Oil and Gas Pipelines to Europe (U)
Oil pipeline
Proposed oil pipeline
Gas pipeline
Proposed gas pipeline
Russian-dominated pipeline[a]
Tanker terminal
500 Kilometers
500 Miles
[a]All or most of the oil or gas moving through a given pipeline is from Russia.
Barents Sea
Varandey
Nadym
Murmansk
Yamal-Europe
Timan-Pechora basin
West Siberian basin
Pechora
Krasnoleninskaya
Proposed Murmansk pipeline routes
Ukhta
Finland
Northern Lights
Baltic Pipeline System (BPS)
Primorsk
St. Petersburg
Russia
Kirishi
Sweden
North Sea
U.K.
Estonia
Ventspils
Yaroslavl'
Latvia
Brotherhood
North Transgas
Butinge
Lith.
MOSCOW
Rostock
Kaliningrad
Gdansk
Samara
Germany
Yamal-Europe
Belarus
Northern Druzhba
Leipzig
Poland
PRAGUE
Kazakhstan
Central Asia
Ukraine
Southern Druzhba
Yamal II
France
Soyuz
Slovakia
Austria
Transgas
Tengiz
Atyrau
Hungary
Brody-Odesa
Adria
Caspian Pipeline Consortium Project (CPC)
Omisalj
Odesa
Tikhoretsk
Romania
Novorossiysk
Kuryk
Italy
CPC terminal
Tuapse
Caspian Sea
Bulgaria
Black Sea
Blue Stream
Sup'sa
Baku-Sup'sa
TBILISI
South Caucasus
BAKU
Istanbul
Samsun
Erzurum
ANKARA
Baku-Tbilisi-Ceyhan (BTC)
Turkey
Ceyhan
Iran
Tunisia
Mediterranean Sea
Syria
Iraq
Libya
Egypt
Jordan
Saudi Arabia
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Changes to the environment due to the Internal Energy Market rules

- Towards the common market – after the Single European Act (1987)
- First Liberalization Package (1996/1998) – third party access (TPA)
- Second Liberalization package (2003) – freedom to choose supplier
- Third Energy Package (2009)
  - Ownership unbundling
  - Targeted market incumbents that had dominated the natural gas and electricity sectors
  - Among the most palpable impacts were in CE countries (due to previous centralization)
  - Gas sector as the most visible case - Gazprom as the main target in the gas sector of CE countries
  - 2006 gas ciris as one of incentives (package proposed in 2007, enacted in 2009)

Main Internal Energy Market rules with an impact on CEE-Russia relations

- **The ownership unbundling principle**
  - prohibits any entity from acting as producer and/or supplier and infrastructure owner at the same time (since it may prevent fair competition)
- **The third-party access principle**
  - requires that equal entry to the market should be available to anyone; no one should be prohibited from doing so (e.g. by being exempted from using certain infrastructure)
- **The prohibition of destination clauses**
  - no one should be told what they cannot do with gas purchased (e.g. reselling it to other entities)
  - oil-indexing cited as one of the causes of unfair pricing

Changes to the environment due to the Internal Energy Market rules

- These rules are applied within the Internal Energy Market (IEM)
  - any state wishing to join the market must subscribe to the rules
  - EU members, members of the Energy Community (EC)
- Key goal – energy companies should not dictate the conditions – market forces should prevail
- Strengthened position of the customer + overseeing bodies (regulators + EC)
- Energy market among the EU´s flagship and most successful initiatives
  - 60-70% of all gas sold in Europe is traded on competitive markets (NW)
- 2019 Gas Directive Amendment
  - Extended to apply on pipelines to and from 3rd countries (NS2?)
  - Practical application?

Oil Sector

- Oil took over the role of the most important energy commodity after WWII (from coal)
- Soviet oil industry damaged during WWII
- Recovered by 1960s, USSR among world´s top producers
- Need for hard currency

Oil sector

- The Druzhba Pipeline – intergovernmental agreement signed 12/1959
- Started in Samara (Siberia)
- By 1962, the pipeline reached Bratislava (SVK), 1965 Litvínov (CZ)
- >5000 KM (the longest oil pipeline in the world)
- North and south branch (Mozyr)
  - North (BEL, PL, GER)
  - South (UA) – 1 (SVK, CZ, HU), 2 (HU)
- REB(CO) – blend of heavy and light crudes with a relatively high sulphur content (1,8%)


Norwegian Sea
Sweden
Finland
Norway
Denmark
United Kingdom
Belarus
Poland
Germany
Ukraine
Austria
Kazakhstan
France
Romania
Italy
Uzbekistan
Kyrgyzstan
Spain
Greece
Turkey
Turkmenistan
Syria
Tunisia
Iraq
Afghanistan
Iran
Pakistan
Algeria
Libya
Egypt
Saudi Arabia
India
Map data ©2020 Google
Mali
Niger


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Proposed oil pipeline
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Proposed gas pipeline
Russian-dominated pipeline[a]
Tanker terminal
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Gdansk
Samara
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Yamal–Europe
Belarus
Northern Druzhba
Leipzig
Poland
PRAGUE
Yamal II
Southern Druzhba
Ukraine
Kazakhstan
Central Asia
France
Czech Rep.
Slovakia
Soyuz
Switz.
Austria
Transgas
Hungary
Brody-Odesa
Atyrau
Tengiz
Mol.
Caspian Pipeline Consortium Project (CPC)
Adria
Omisalj
Odesa
Tikhoretsk
Romania
Novorossiysk
Kuryk
Italy
Croatia
Bos. & Her.
Serbia and Mont.
CPC terminal
Tuapse
Caspian Sea
Black Sea
Blue Stream
Bulgaria
Supsa
Baku-Sup'sa
TBILISI
South Caucasus
BAKU
Maced.
Alb.
Istanbul
Samsun
Greece
Erzurum
ANKARA
Baku-Tbilisi-Ceyhan (BTC)
Turkey
Tunisia
Ceyhan
Iran
Mediterranean Sea
Syria
Cyprus
Lebanon
Iraq
Israel
Jordan
Libya
Egypt
Saudi Arabia
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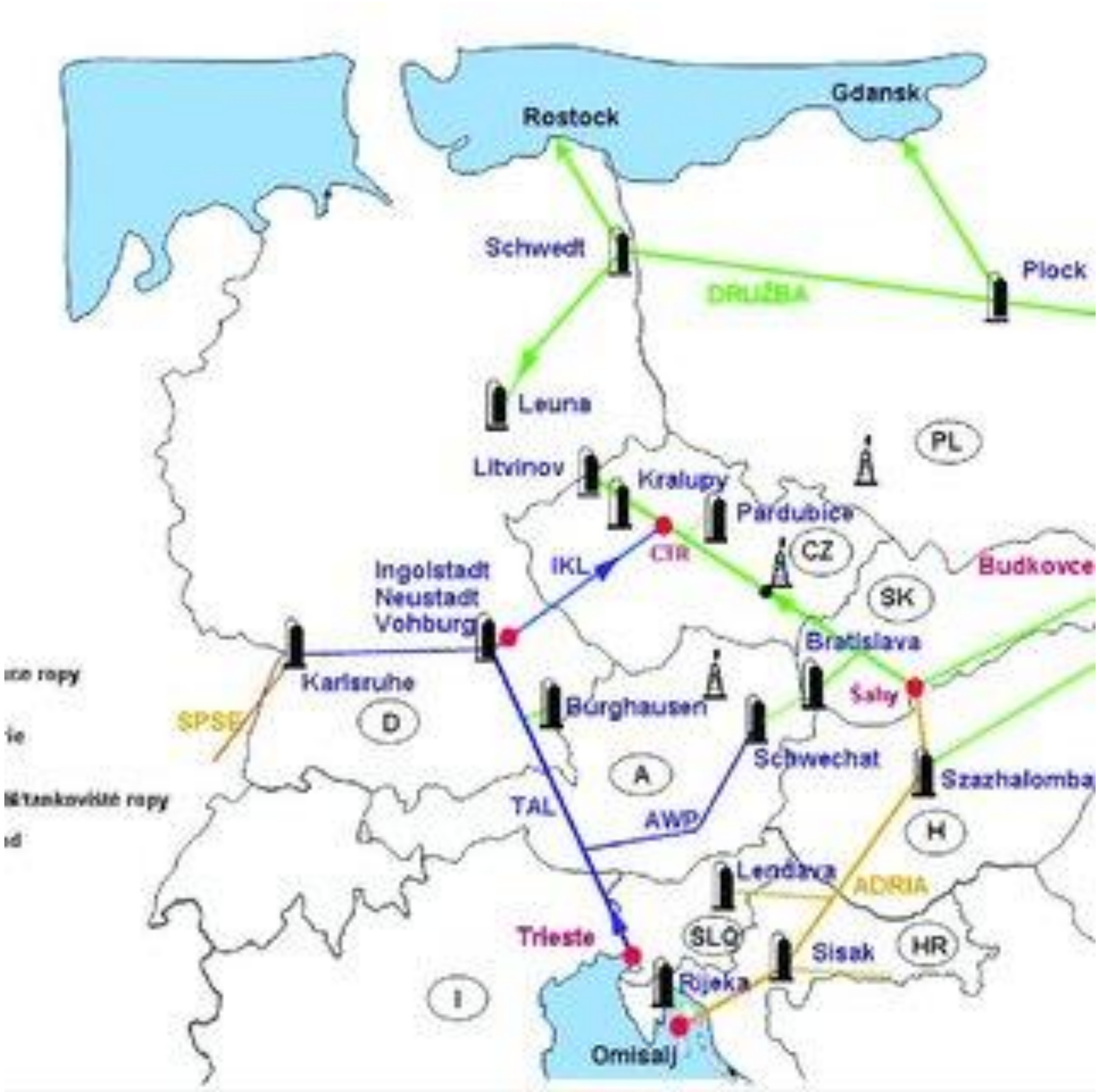
Oil sector

- 1990s – diversification, concerns about Russian stability and ability to keep stable supplies
  - Supply curtailments in 1990, 1991, 1994, 1995, 1996 – economic/operational issues, disputes w/ transit countries
  - 2007 (BEL+RUS argument over fees)
  - 2008 shortly after CZ agreed on having the US Radar
  - Further curtailments – 2009 (UA+RUS argument over fees), 2012 (undisclosed), 2019 (contamination) - Issues for facilities adjusted to REB (Litvínov)
- Concerns in the Baltics – oil supply cuts in early 1990s (1990, 1992)
- IKL Pipeline - 1996
  - connected to TAL (from Trieste, ITA)
  - Considered as a milestone for energy security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Leuna
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Litvinov
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Ingolstadt
Neustadt
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TAL
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Lendava
ADRIA
SLO
Trieste
Sisak
HR
Rijeka
I
Omisalj

Oil sector

- 1990s - Entaglement of energy and foreign policies
- Decline of Russia´s formative power over the region
- Russia focused on status quo conservation – unsuccessfuly
    - despite protests, the idea of neutrality for the region was rejected
    - Russia´s resentment to the integration
- CE as the prime mover of diversification, other regions falling behind
    - Russia´s rhetorical resistence – arguments of economic favourability (lower price)
    - Russia´s internal instability and CE´s fears of revisionsim prompted CE states to push for greater „western“/NATO integration

Differences in development after CW

- CZ – determined to diversify in 1990s, position softened in 2000s
- SVK – transit position as a cornerstone of the state´s foreign policy, position changed after gas crises
- PL – constantly anti-Russian
- HU – focused on bilateral relations (gas use, Paks II)

New challenges to the region

- Decarbonisation – EU´s goal of carbon neutrality by 2050
- Fourth Energy Package - 2019
    - efficiency, more renewables, energy transition
- CE - Energy-intensive economies with a cautious approach
- Conditional and transactional attitude

Russia in CEE after the CW

- Russia´s role is determined by its capacities
- In an economy hinged on exporting resources, capacities corelate with their prices and export volumes
- 1990s as an era of low oil price (+ economic crisis of 1998)
- Realist paradigm as a dominating concept of Russian politics (0-sum game)
- Defensive realism
    - status quo conservation, defensive stance
    - implemented when an actor lacks capacities to make gains at the expense of others
- Offensive realism
    - pushing the boundaries of the status quo (and actual boundaries)
    - implemented when an actor possesses capacities to make gains

Russia in CEE after the CW

- 1990s as an era of low cacpacities – defensive realism
  - economic crunch
  - low political and ideological power
- Russia´s goal was to cement the status quo as it did not have the capacities to actively pursue its geopolitical goals
  - era of low influence
  - efforts to enforce neutral status of the CE region – unsuccessful
  - against NATO enlargement
  - perceived as a grave geopolitical loss

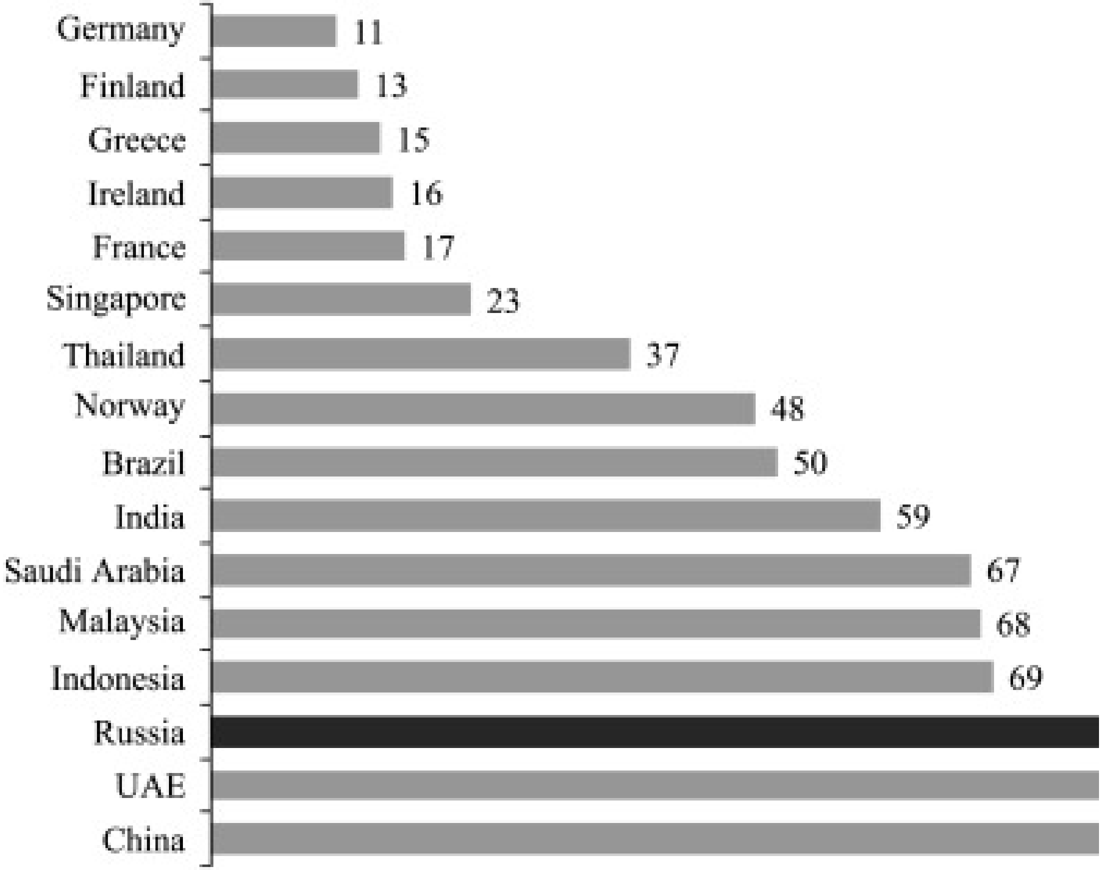
Russia in CEE after the CW

- 2000s as an era of robust economic growth fuelled by rising oil prices
- Consolidation of state assets and increase of state´s stakes in key (energy) companies
- The economic growth cloesly correlated with oil price increase – the dependence grew bigger over the decade
- State role in the energy sector openly stated as the key component of the state´s power and capacities
- Hence, Russia´s capacities, aspirations, and influence grew accordingly – offensive realism

Russia in CEE after the CW

Russian GDP – annual change in %

State-owned share in the 10 largest companies in 2011 (in %)



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Views on Russia from CEE

- Perceptions vary depending on time and region
- Energy as a litmus test of discourses and intentions (vs. abilities) - 1990s
- CE – departure from the East, reorientation/diversification – dominating discourse
- The Baltics – fast political departure, slow diversification
- SE – slow political departure, slow diversification
- The Balkans – internal struggles overshadowed transformation and diversification
- The spirit of emancipation and departure from the Russian sphere dominated

Views on Russia from CEE

- 2000s
  - the era of more individualized issues and attitudes
  - hints of pragmatic relations with Russia disappeared by the end of decade
- Oil price changes
  - 2008 and on
  - Russia on a learning curve
- National Wealth Fund – est. 2008
  - „rainy day“ fund
  - Used to spur economy and patch up national budget