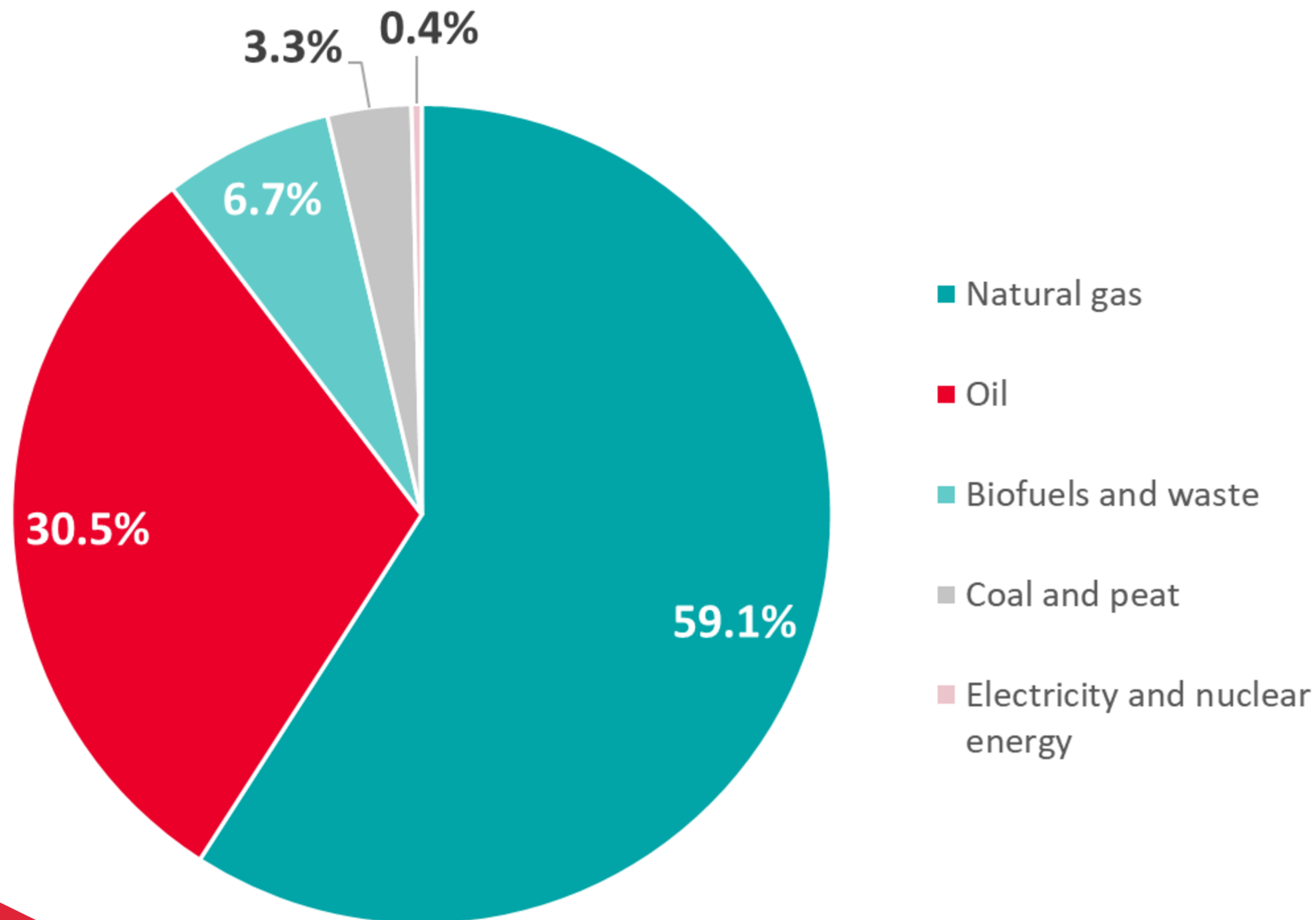




Assessment of tariff increases for energy resources in Belarus under a transition to world-market fuel prices

Energy balance of Belarus

Gross consumption of fuel and energy resources in Belarus by source, 2020



- Domestic production covers only around 15% of energy demand.
- Belarus relies heavily on imported energy resources, mainly from Russia.
- This dependence gives Russia economic and political leverage over Belarus.

Scenario framework

Scenario	Description
Russian fuel price scenario	Current/baseline supply conditions based on Russian gas and oil prices
European market scenario	Alternative supply through EU/world-market infrastructure and prices

Key technical terms

NPP — Nuclear Power Plant. Generates electricity from nuclear fuel.

CPP — Condensing Power Plant. Generates electricity only, mainly using natural gas.

CHP — Combined Heat and Power Plant. Generates both electricity and heat.

Boiler plant. Produces heat only, mainly for district heating.

GTS — Gas Transmission System. High-pressure pipeline system for gas transportation and transit.

LNG terminal — Liquefied Natural Gas terminal. Receives LNG, stores it, and converts it back into gas for pipeline transport.

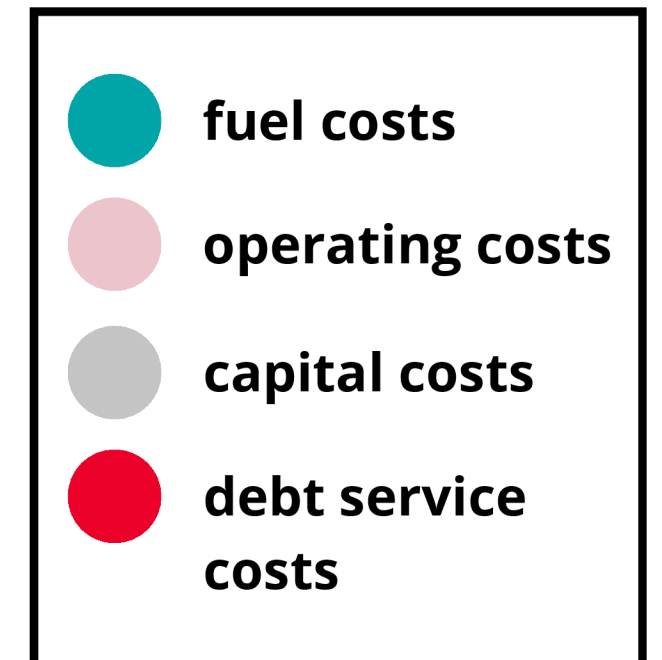
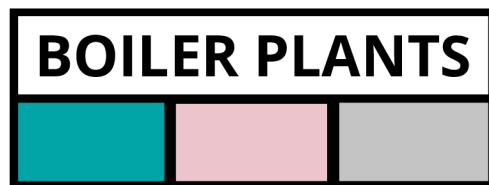
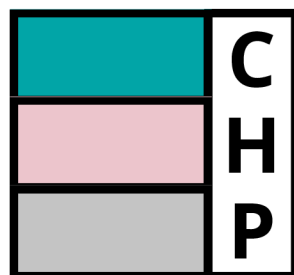
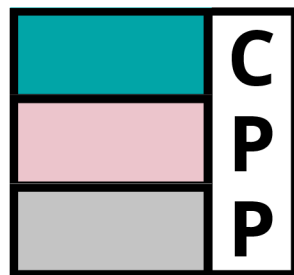
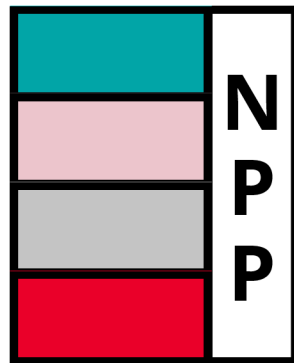
Total tariff. Tariff that covers economically justified costs.

Price of Russian gas at the Belarusian border and domestic transportation cost

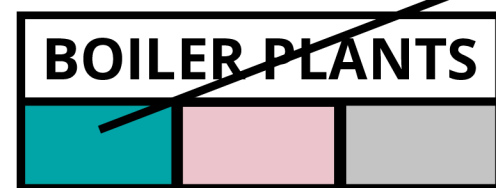
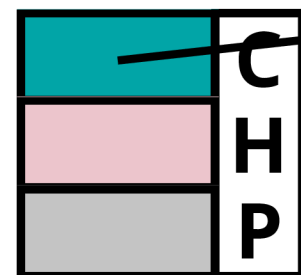
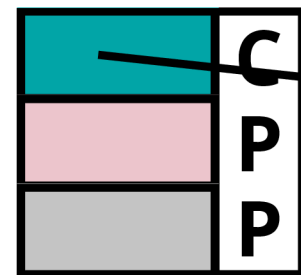
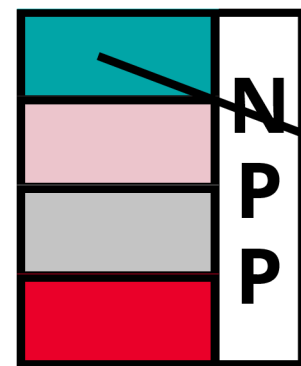


* - The \$8.9 difference may be due to exchange-rate fluctuations.

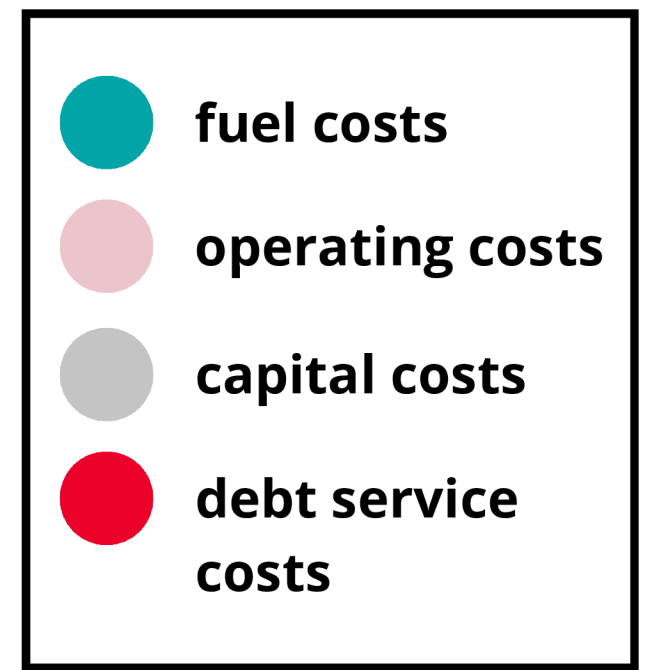
Electricity and heat tariff formation based on Russian gas price



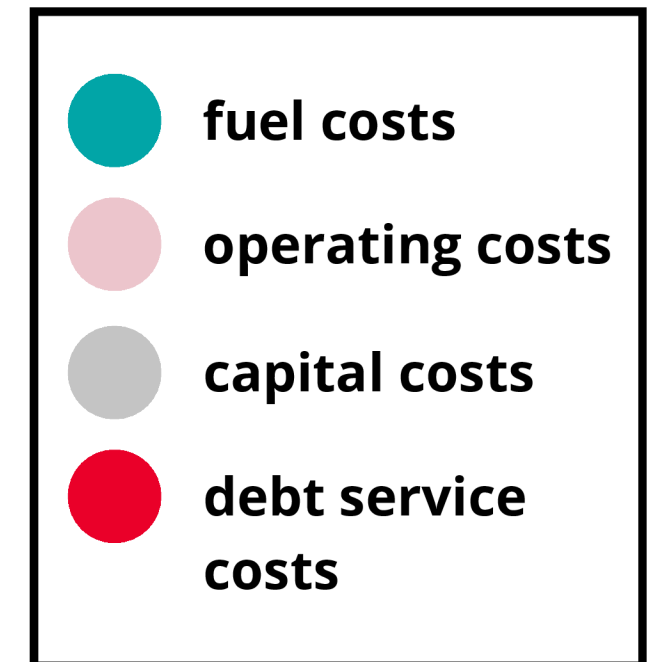
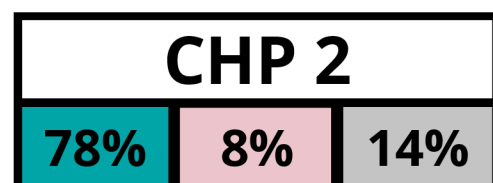
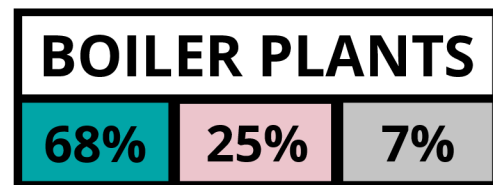
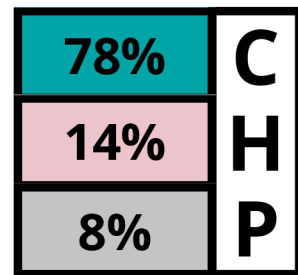
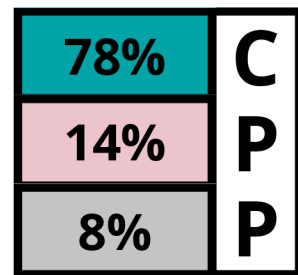
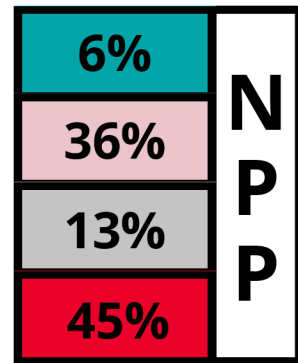
Electricity and heat tariff formation based on Russian gas price



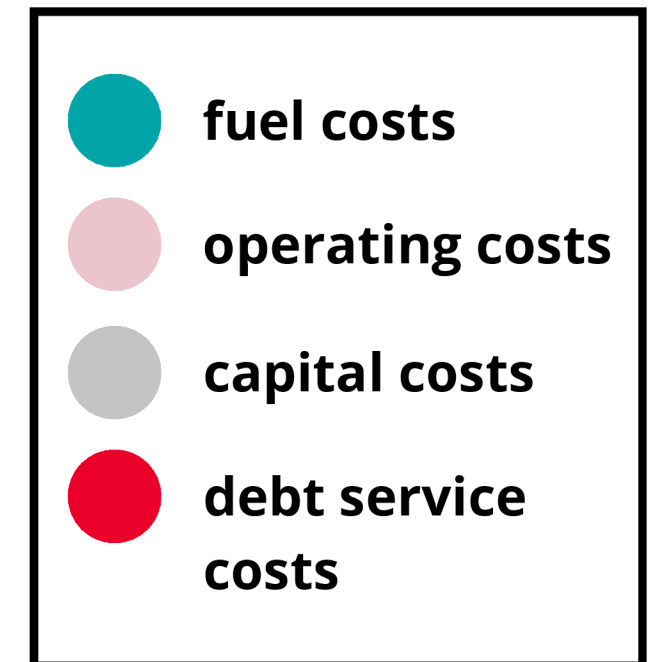
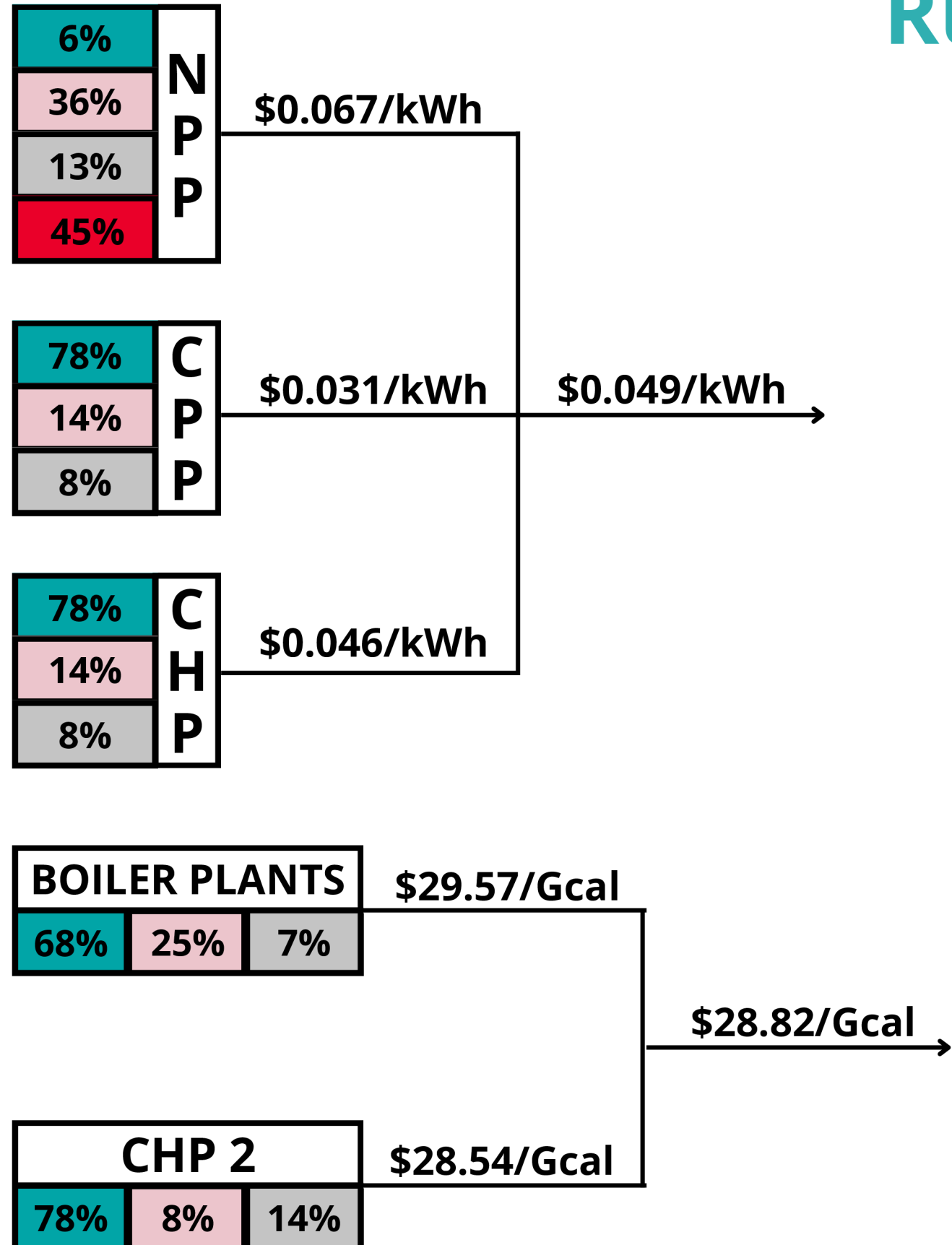
Fuel cost component



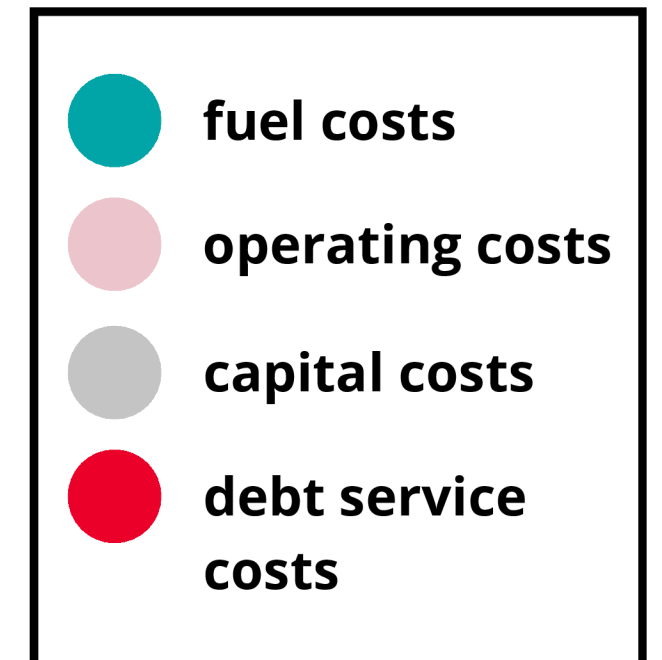
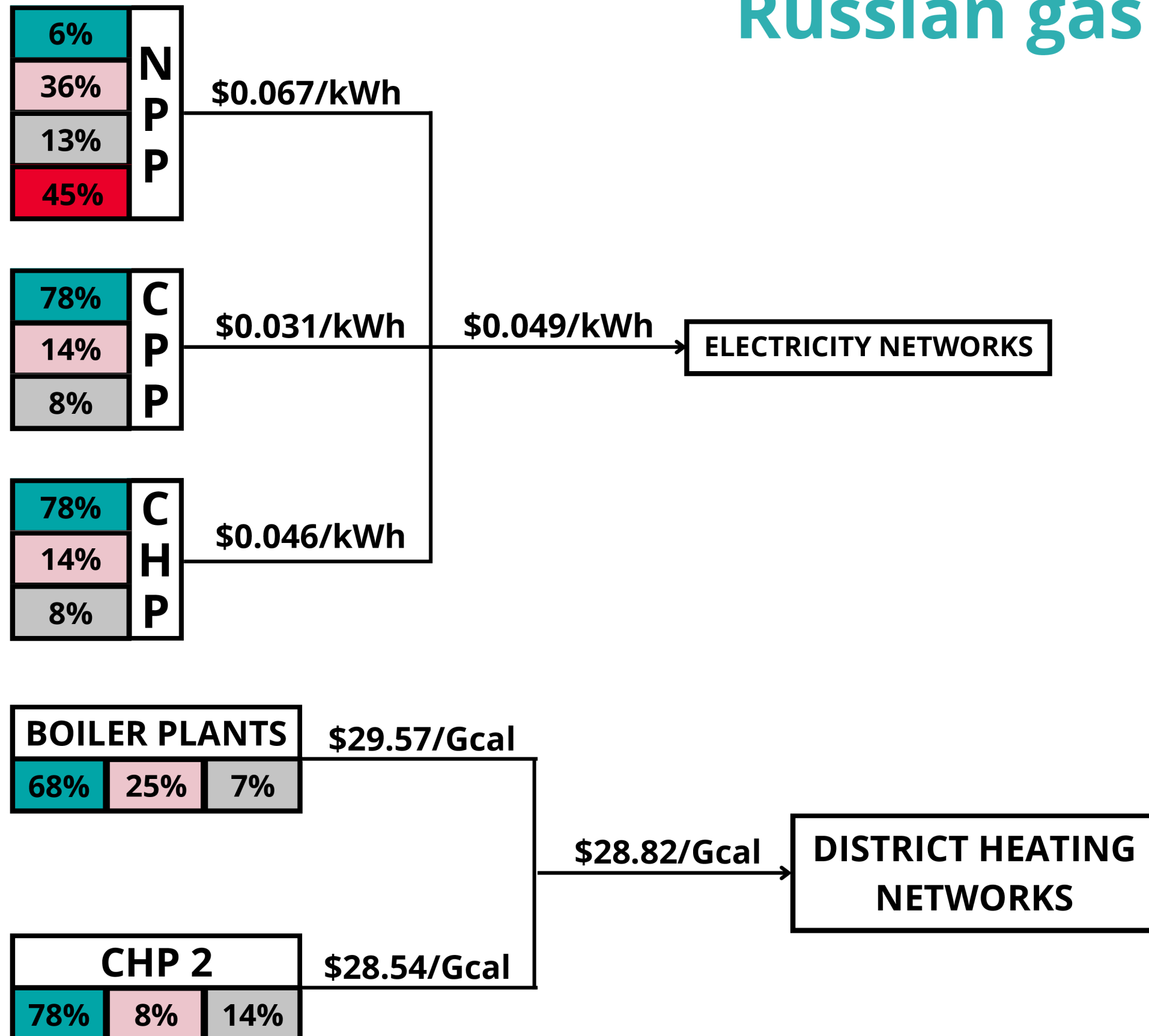
Electricity and heat tariff formation based on Russian gas price



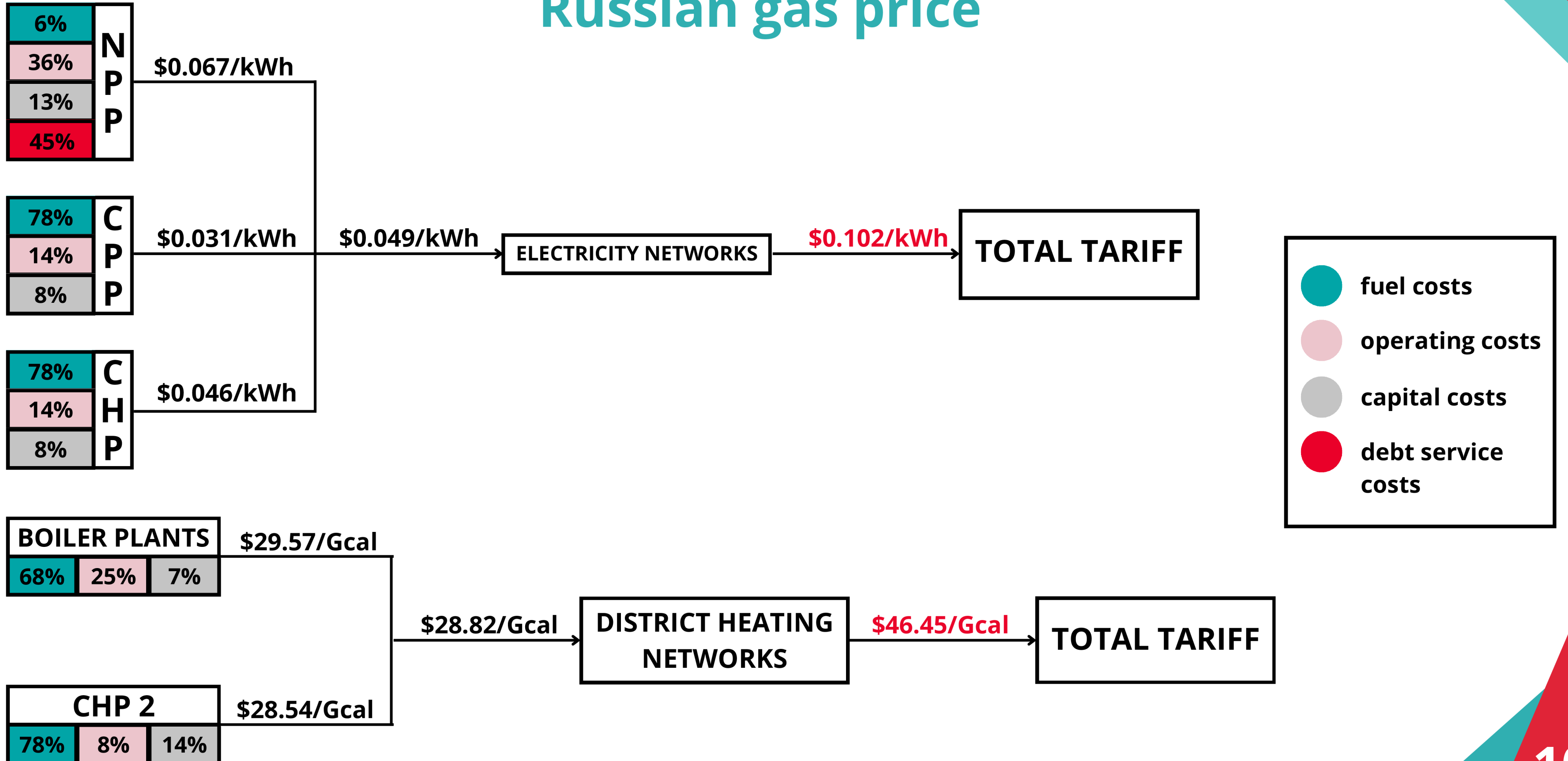
Electricity and heat tariff formation based on Russian gas price



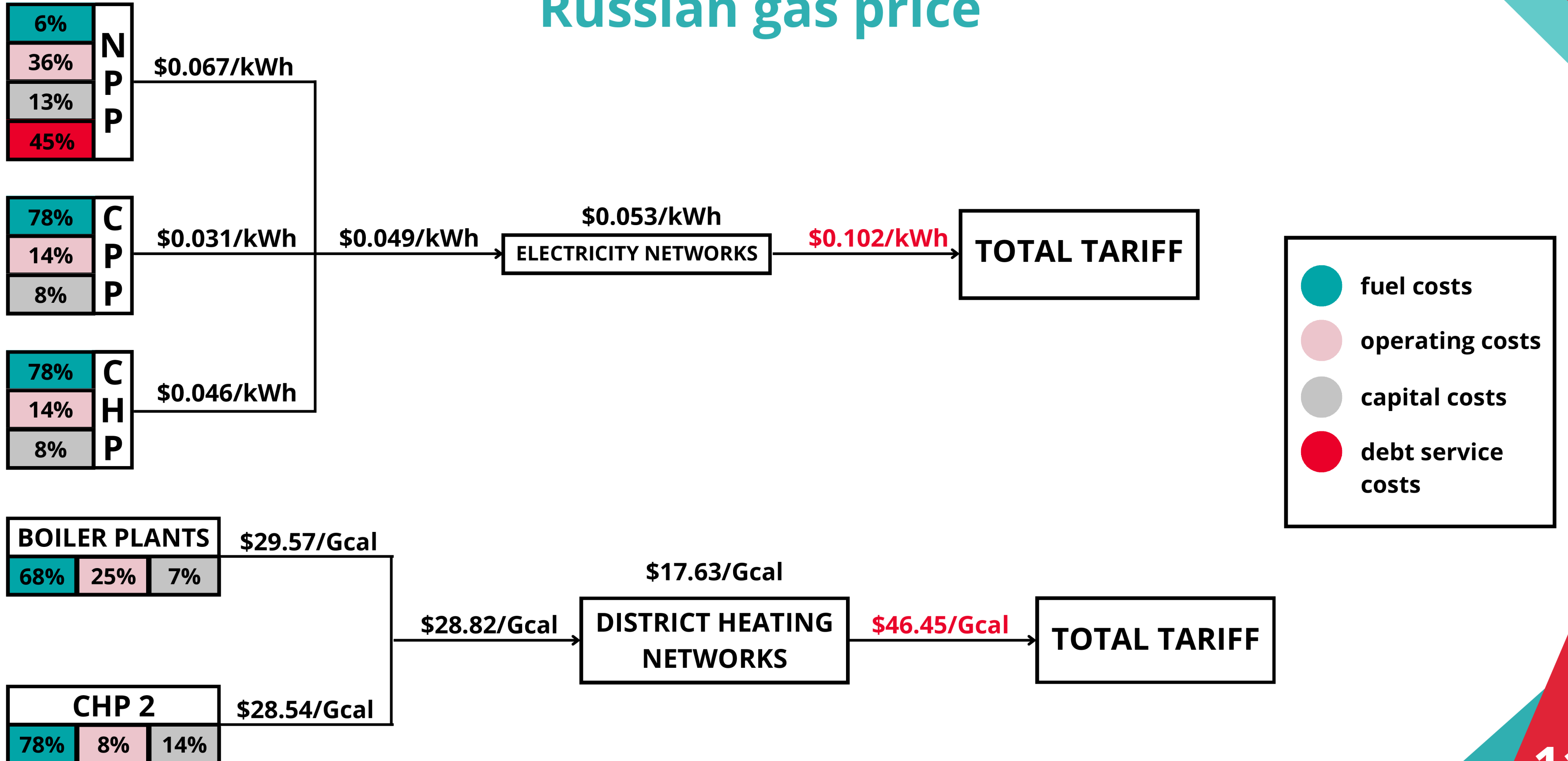
Electricity and heat tariff formation based on Russian gas price



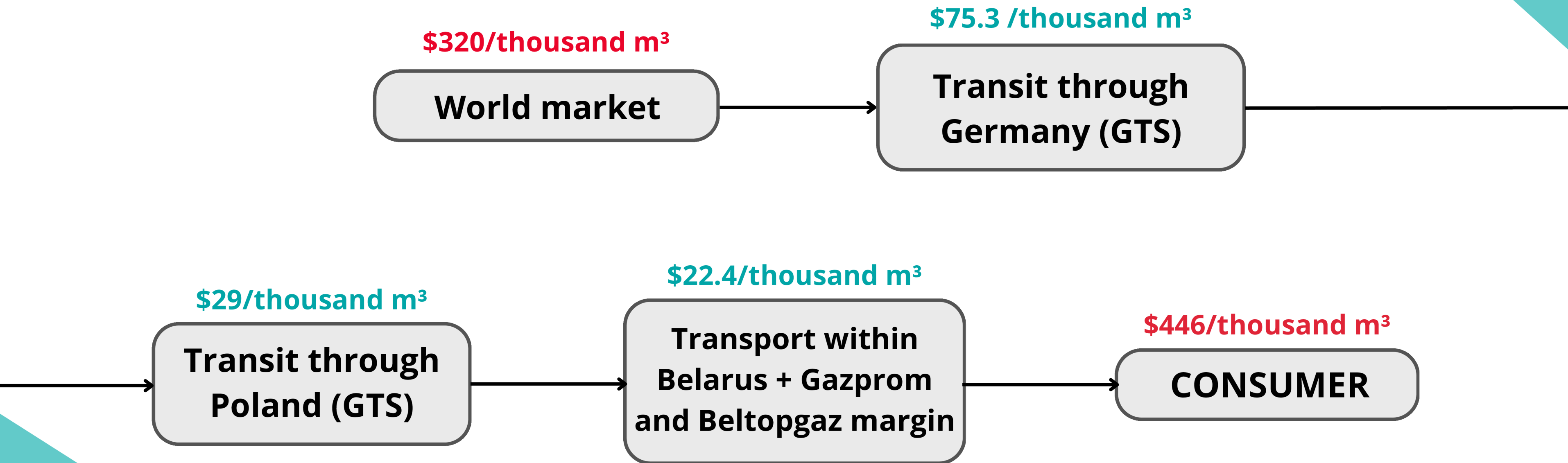
Electricity and heat tariff formation based on Russian gas price



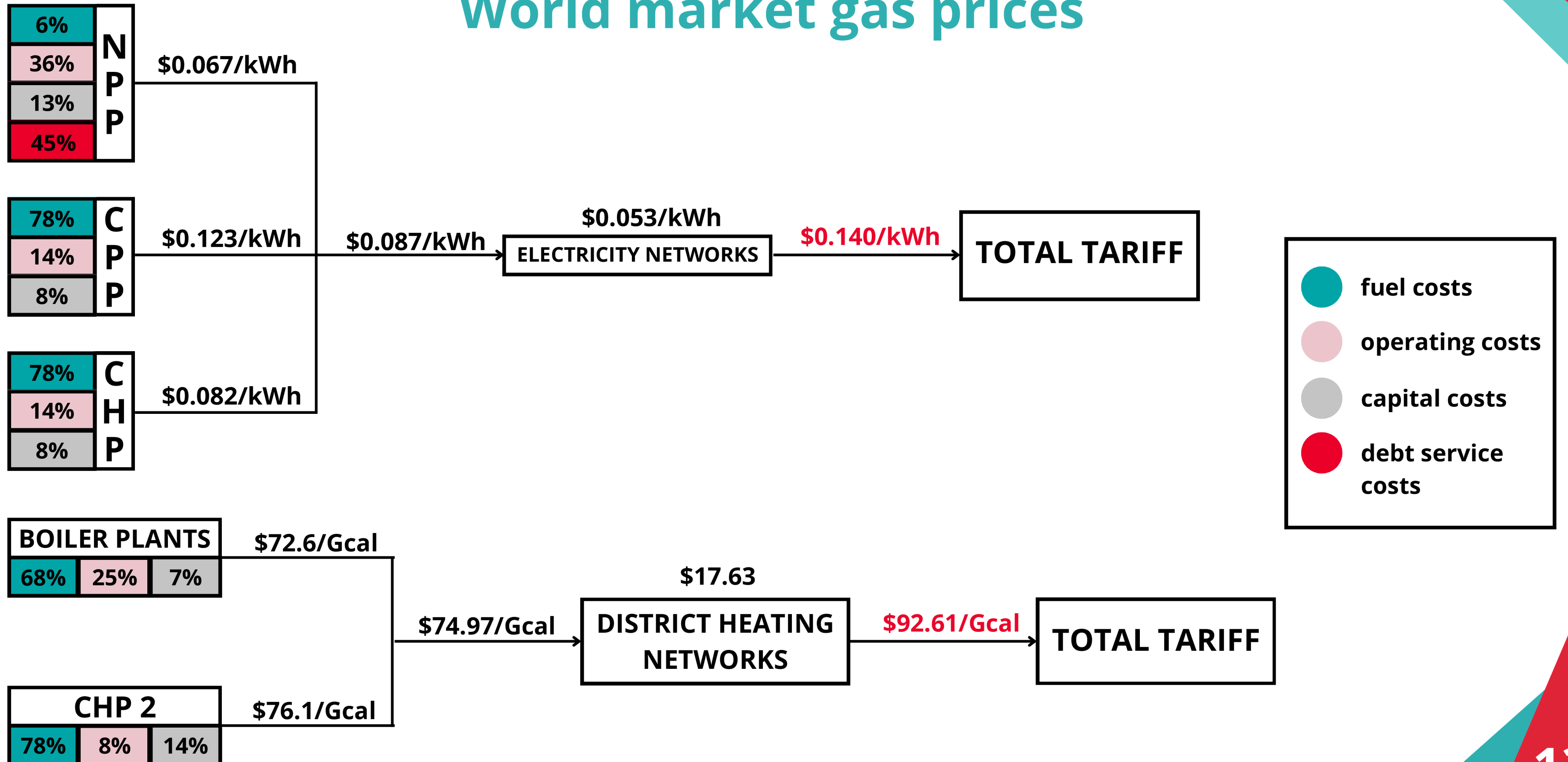
Electricity and heat tariff formation based on Russian gas price



World market gas price at the Belarusian border and domestic transportation cost



Electricity and heat tariff formation based on World market gas prices

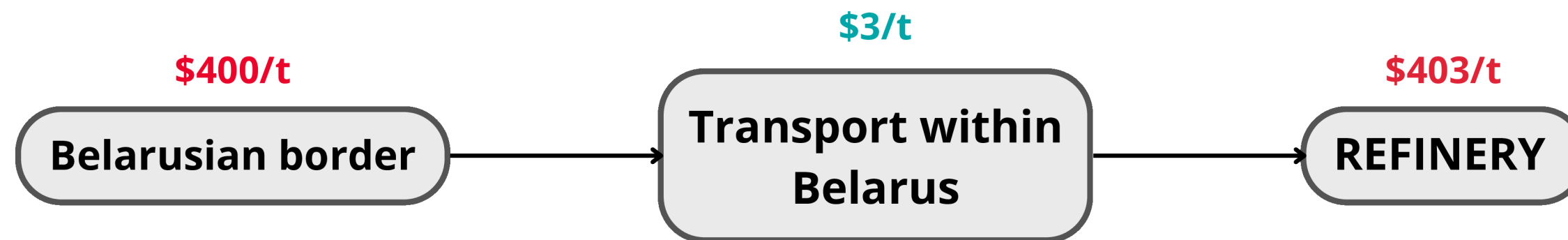


Russian vs World gas prices: impact on energy tariffs

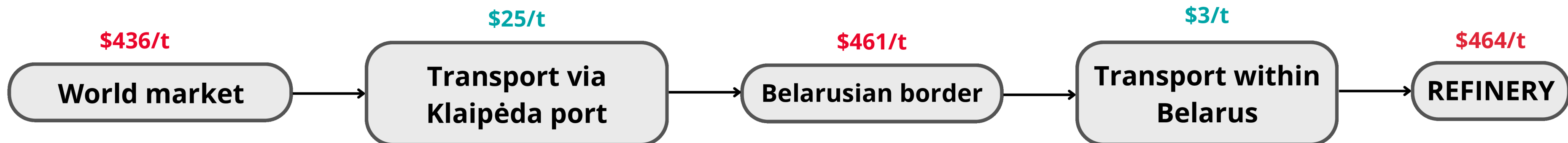
Indicator	Russian Gas	European Market Gas	Times higher
Gas price	\$142/thousand m ³	\$446/thousand m ³	3.14×
Average electricity generation cost	\$0.049/kWh	\$0.087/kWh	1.78×
End-user electricity tariff	\$0.102/kWh	\$0.140/kWh	1.37×
Average heat generation cost	\$28.82/Gcal	\$74.97/Gcal	2.60×
End-user heat tariff	\$46.45/Gcal	\$92.61/Gcal	1.99×

Oil supply cost BEFORE refinery

RF route:



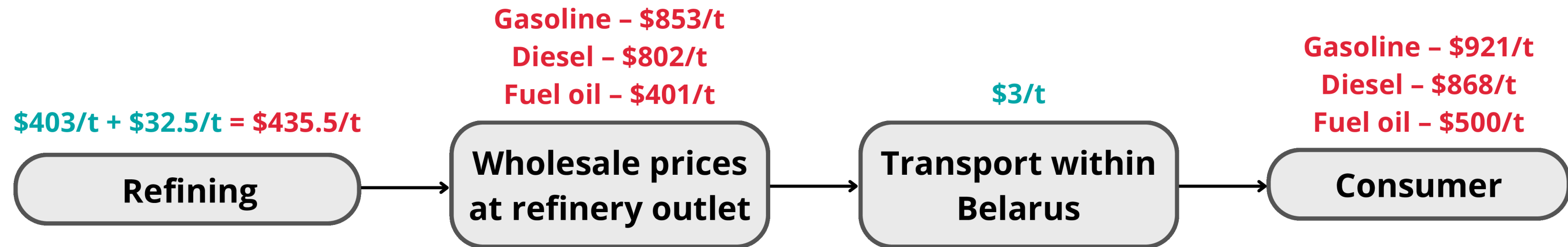
EU route:



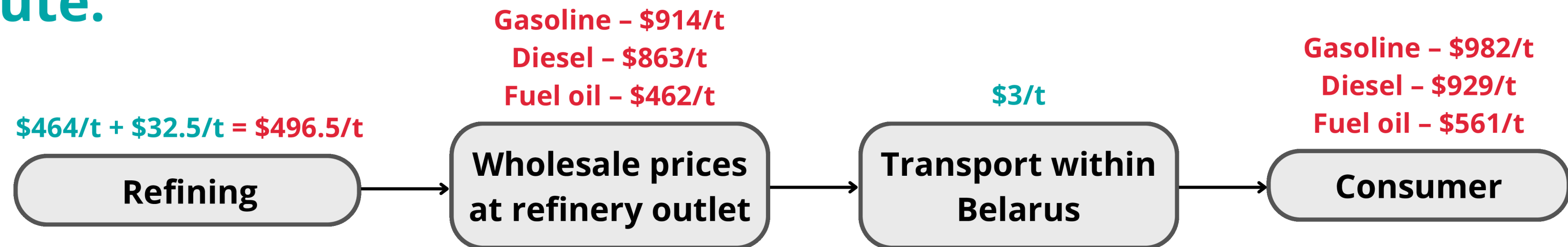
EU-route oil is about \$61/t, or 15% more expensive at the refinery.

Refining and wholesale prices

RF route:



EU route:



Higher crude oil costs raise the cost base, but gasoline and diesel prices increase more moderately because final prices include refining, logistics, taxes, and margins.

Key findings

Oil

- Russia: **\$400/t** vs EU: **\$461/t**, 15% more expensive.
- Petroleum product prices increase by only **7-8%**.
- Alternative supplies from the EU increase costs by \approx **\$290 mln/year**.
- Domestic wholesale prices are comparable to or higher than export prices \rightarrow **no subsidization**.

Gas

- Russia: **\$142/thousand m³** vs EU: **\$446/thousand m³**, 3 times more expensive.
- Alternative supplies from the EU are \approx **\$5.24 bn/year** more expensive.
- At current gas prices, **CHPs are cheaper**, but with EU gas, **NPP becomes more cost-effective**.
- Electricity tariff rises by **1.4 times**; heat tariff rises by **2 times** \rightarrow **targeted subsidies** are needed instead of broad subsidies.

THANK YOU FOR YOUR ATTENTION!