Macro Focus

Energy prices – a manageable challenge for the region's economies

- Energy prices have surged lately and are expected to remain elevated throughout winter, fuelling higher inflation, which in most of the region is expected to peak early next year.
- Businesses shift the costs to clients, but most consumers' purchasing power will remain strong. Vulnerable households should see government support, especially in the Baltics.
- The green transition implies higher and more volatile energy prices in the medium term, while in the long-term renewables should provide a cheaper source of energy for the world.

Energy prices have risen due to a rapid economic recovery, uncharacteristic weather patterns, and disruptions to the energy supply. Unless Russia acts to increase gas supply markedly, we expect the prices of energy to be elevated at least until the end of winter, as energy demand is high and supply restricted.

More expensive energy has a limited negative impact on most economies in the Nordic-Baltic region. Energy has a small share in the budget of the average household, but it has managed to push inflation up notably in the region. However, wage growth is expected to stay above inflation, and the labour market is tightening; therefore, the working-age population will still enjoy strong purchasing power. At the same time, the poor, the elderly, and those relying on benefits could be much more vulnerable, especially in the Baltics, in which case government help should be offered.

When it comes to businesses, for most sectors, energy prices do not represent a notable share in total costs. There are more energy-intensive industries that will feel the pressure. However, for the potentially more vulnerable, it is common for them to hedge their positions. Furthermore, demand will remain strong, and most businesses expect to be able to charge higher selling prices to their clients.

Rather than derailing the green transition, this crisis underscores the need for much larger investments in wind and solar capacities and an improved network to speed up the transition.

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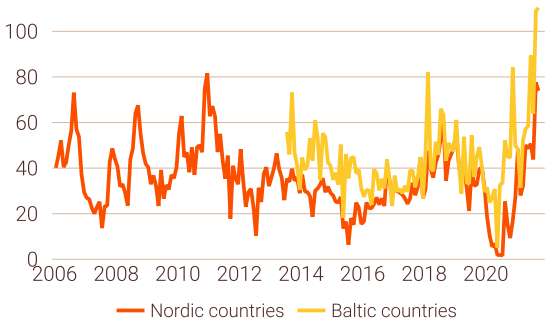
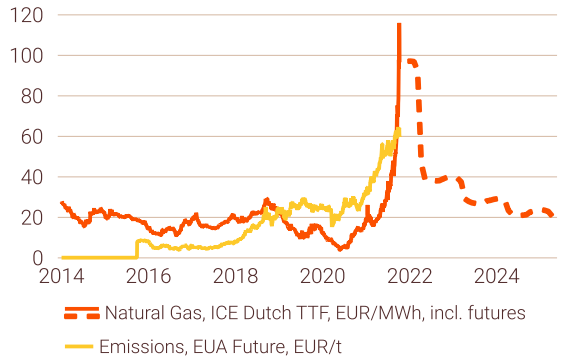
Electricity market price
EUR/MWh



Sources: Nordpool, Swedbank Research & Macrobond

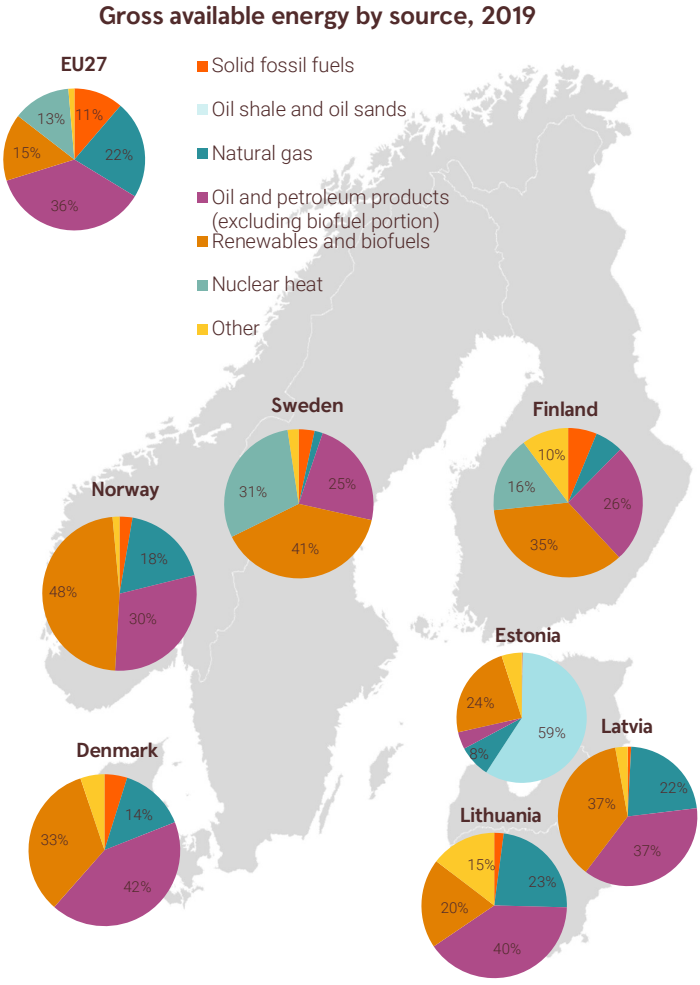
Natural gas and carbon prices



Sources: Swedbank Research & Macrobond

Energy price surge – not easily resolved

Coal, natural gas, and electricity prices have soared due to the rapid global economic recovery. In Europe, uncharacteristic weather patterns and disruptions to the energy supply have also played a role. Winter was colder and summer warmer in many regions, requiring more energy to either heat or cool buildings. Low precipitation has depressed water reservoir levels and hydro energy production, especially in Norway, where around 94% of electricity comes from hydropower plants. Less wind has also meant less wind power (wind supplied 14% of Europe's electricity in 2020). Taken together, this lower production of renewable energy has increased demand for more polluting energy sources, like coal and natural gas. Higher demand has also helped push up the price of carbon, which has risen threefold over the past year.



Source: Eurostat

Amid higher carbon prices, as well as efforts to increase the use of cleaner energy sources, coal power plants in Europe are being closed. Ageing nuclear plants are being phased out. This trend reduces the supply of energy and lifts demand for the less-polluting natural gas. However, gas supply is insufficient. Russia has slowed gas deliveries to Europe (Russia supplies around 40% of gas consumed in the EU). Concurrently, liquefied natural gas imports face stiff competition from Asia (Japan, China, and South Korea), where prices are also elevated – mostly due to robust demand. Inventories at European gas storage facilities are at historically low levels, and prices have skyrocketed in the past year. European gas tankers are only 70% full currently, instead of the usual 90%, and the approaching winter is making governments and markets nervous, exacerbating price pressures.

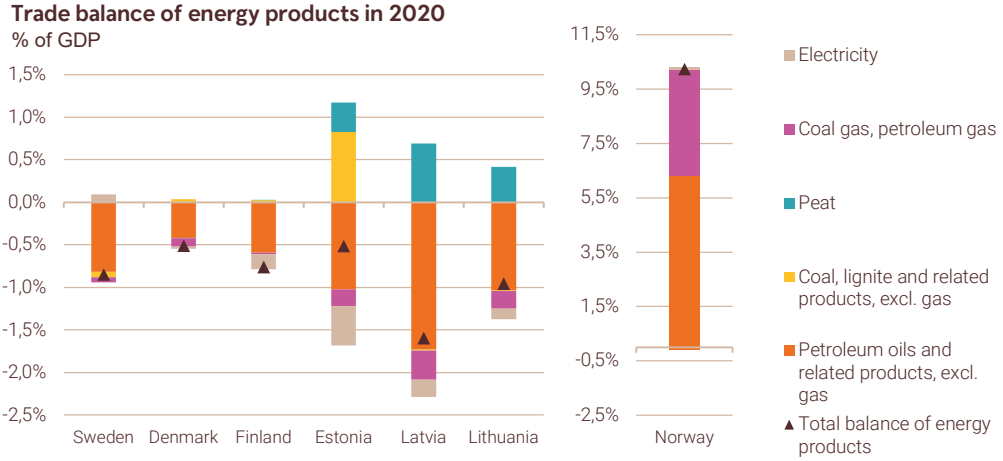
Futures show the prices of energy will remain elevated at least until the end of winter. They could potentially climb higher, especially if winter is cold, dry, and not so windy. Vice versa – if the weather is mild and/or suitable for a material increase in renewable energy output, price pressures could ease earlier than expected. Restarting some idle coal and oil shale power plants, despite being bad for green ambitions, could cap further price increases; however, this too will be expensive, given the high prices of coal and carbon permits. Potential relief could also come from Russia's increasing its gas supply to Europe. But if this comes via the new Nord Stream 2 pipeline, it could take months before the paperwork is finalised and the supply sufficiently boosted. At the same time, the new electricity cable between Norway and the UK could have a twofold effect: it could lower the supply of cheap hydro energy in the Nordic-Baltic electricity market, but also moderate price spikes in times of low hydropower production.

Rather strong on renewables, but net importers of energy

The overall supply of energy for all activities (gross available energy) shows that most of the region's countries, except Estonia, are less dependent on fossil fuels than the EU average. Sweden and Finland, with large share of nuclear and renewables, are the economies least reliant on fossil fuels. Norway stands out with the largest share of renewables, but half of its gross available energy is still fossil-fuel based. Natural gas has the largest share in the total available energy for Lithuania and Latvia.

Trade balance data suggest that the net effect of surging energy prices is negative for most of the Nordic and Baltic economies. Norway is an exception, since it is a major net exporter not only of oil products but also gas. In fact, Norway is seeing its highest-ever export revenues for oil and gas, and the best commodity terms of trade ever recorded. The rest of the countries in the region import more energy than they export, so they lose out when energy prices increase, even when certain sectors benefit from higher energy prices. However, the Nordic-Baltic countries mostly import oil-related products, whose prices, although well above last year's lows, have not reached all-time highs like the prices of electricity or natural gas in recent months.

Trade balance of energy products in 2020
% of GDP



Source: national statistics

Higher inflation – not a tailwind for household consumption

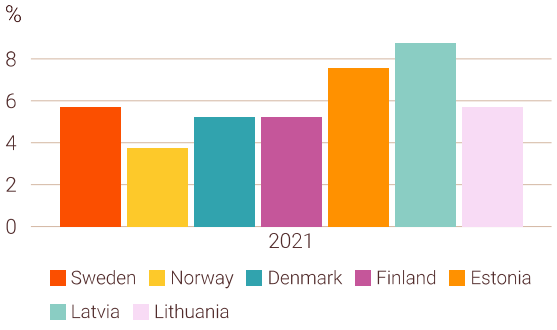
A few months of elevated energy prices have already started to affect consumers. Electricity, gas, and heating amount to 4-9% of consumers' budgets in the Nordic-Baltic region. The share of energy in consumer baskets is larger in the Baltics, except Lithuania, in part because that country has a reduced VAT rate (9%) for district heating, and uses firewood and biofuels for heating.

Overall, the energy price increase in recent months – although considerable – is likely to affect consumers less than electricity and gas spot price developments suggest.

Households' total electricity expenditure does not depend solely on wholesale prices, but also on network costs and taxes. Depending on the wholesale price level, the electricity price could be responsible for as little as 30% of the final expenditure on electricity. In addition, some households are hedged against price fluctuations by holding fixed-price energy contracts; however, there are large differences between countries. For example, the share of households paying the spot price is relatively small in Latvia (15%), but considerably larger in Norway, where around 75% of price contracts are tied to the spot price. Of course, even the fixed-price contracts will see prices climb once the terms of the contract allow; therefore, all households will see bills rise at some point. The good news is that there are households that have invested, e.g., in their own solar panels and are reaping the benefits.

Gas prices are having an impact on heating costs in the Baltics, but dependency on gas in the district heating sector has been declining in recent years due to a shift to renewables (biomass). Some cities, like Riga and Vilnius, are reliant on gas and will likely see the highest rise in utility bills. Unfortunately, the price of biomass is also materially higher than a year ago, when it was at record lows, which means that price pressures are present everywhere. Heat generation in the Nordics is less reliant on natural gas, especially in Norway. Instead, waste is more often used to produce heat, which limits the impact on consumer costs. Overall, the households that live in low-quality housing with poor insulation and old heating systems will suffer most from price increases; this highlights the need to continue to improve the energy efficiency of buildings, especially in the Baltics.

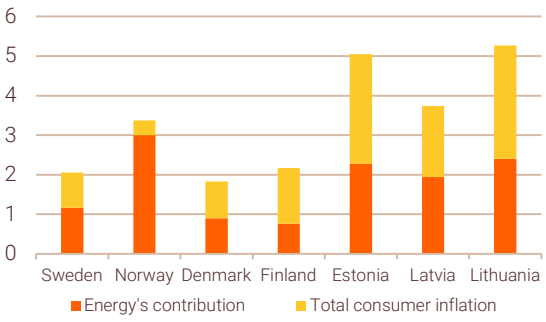
Share of electricity, gas, and heating in consumer basket



Sources: Swedbank Research & Macrobond

Energy and inflation, August 2021

P.p. and %



Sources: Swedbank Research & Macrobond

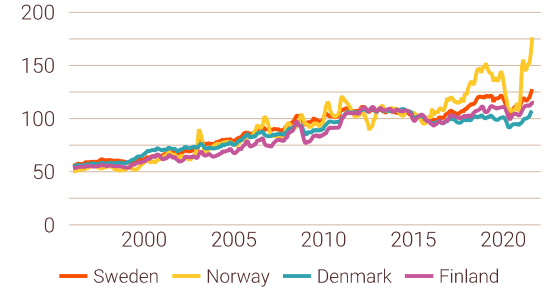
Even though the spiking spot prices are not directly transferred to consumers, the energy component in consumer inflation has deviated from normal seasonal patterns and exhibited an unusually strong upward trend since last winter throughout the Nordic-Baltic region. In most of the region's economies, indices are currently signalling somewhat above the pre-crisis price levels for the energy component; the notable exception is Norway, where prices are materially higher. At the other end of the spectrum, Lithuania is seeing a price surge; the price is at the pre-crisis level now but still notably below that observed 10 years ago. Going forward, as wholesale prices are gradually absorbed in consumer prices, these indices will remain elevated and in many economies - even climb higher.

The spike in energy prices has lifted inflation to highs not seen for many years. In the Nordics, annual consumer inflation reached around 2-3% in August. In the Baltics, where energy's share in consumer baskets is generally larger, wage pressures substantial, and the price-cost level convergence still ongoing, inflation amounted to 5-7% in September. Energy's direct contribution to inflation amounted to around 50% in the Nordic-Baltic region in August. In Norway, the contribution was much larger (89%), due to the large energy price contributions that started already last winter.

The high energy prices are expected to keep inflation elevated in the coming months. Though the share of energy in production costs of different goods and services is generally modest, expensive energy will also likely raise the price of non-energy goods and services, especially in the current context of supply chain disruptions, on the one hand, and strong demand on the other. We expect inflation in the Nordics and Baltics to peak later in 2021 or early next year and decelerate thereafter. The pace of deceleration would be slower than expected if the energy price surge proves longer-lived than currently forecast.

Energy prices, Nordics

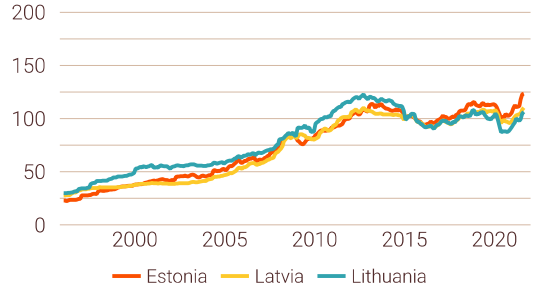
Index, 2015=100



Note: Includes electricity, gas, liquid & solid fuels, heat energy and fuels & lubricants for personal transport equipment.
Sources: Swedbank Research & Macrobond

Energy prices, Baltics

Index, 2015=100



Note: Includes electricity, gas, liquid & solid fuels, heat energy and fuels & lubricants for personal transport equipment.
Sources: Swedbank Research & Macrobond

Even though the share of energy in consumer baskets is relatively small, the poorest quintile of the population spends a substantial part of its total income on gas and electricity (comparable Eurostat data from 2015 indicate the shares to be 10-16% in the Baltics and 3-6% in the Nordics). Therefore, the more vulnerable part of the population, especially in the Baltics, where electricity and heating claim a much larger share of one's budget, is likely to see a notable dent in its purchasing power, in which case government support will be required. This support should not come as a decrease in taxes on energy, since this would distort the signals that the price rise is sending – namely, to limit consumption and switch to renewables even faster. Furthermore, it would be an expensive measure, and, once taxes are lowered, governments will find it hard and unpopular to raise them back. Rather, the vulnerable households should be targeted via the wefare system.

For the working-age population, the situation is much better. In the Baltics, average wage growth is projected to be notably faster than inflation in Latvia and Lithuania; in Estonia, meanwhile, wage growth is forecast slightly above price growth. Overall, though, purchasing power should remain rather strong. In the Nordics, wage growth is rather muted, but the households' financial position has overall benefitted from rising asset prices during the pandemic. Here, risks are skewed to low-income households too; in the absence of higher wage growth rates, these households will, going forward, have their purchasing power reduced if energy prices remain elevated. However, this could also be an impetus for greater wage drift and wage demands in negotiations.

Energy price surge - manageable for most, but a headache for some businesses

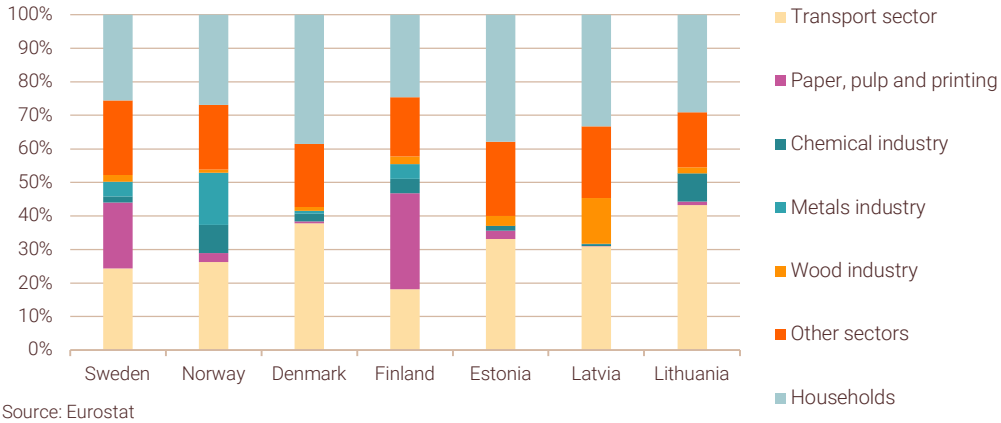
Higher energy prices also affect companies. While the average share of energy in total costs of enterprises of the region's economies is relatively small (5% or less), there are several sectors that are vulnerable. On average, in the seven countries of the Baltic-Nordic region, industry consumes 26% of total energy consumption in the country, and the transport sector 27%. Among the different industries, paper, pulp, chemicals, metals, construction materials (cement), and wood are energy intensive.

The share of energy in total production costs is the largest in energy production itself (around 20% of total costs, on average, in the region). The share is also large in land transport (around 20% of total costs in the region, although the price of the main energy source – diesel – has not increased as much

as the price of gas or electricity), mining (around 8% of total costs in the region), and certain industries, like the manufacture of pulp and paper; and chemicals and fertilisers (both industries close to 10% of total costs, on average, in the region).[1] In Lithuania, as in other European countries, the largest fertiliser producer is shutting down some production lines as gas prices are too high for profitable production. In Latvia, some smaller energy traders are going out of business because they have offered fixed-price contracts to clients and are unable to fully hedge the price.

Energy consumption by sectors in 2019

% of total in the country



Source: Eurostat

At the same time, overall demand in the economy and, most important, in the manufacturing sector, is currently high, and costs can in most cases be shifted to clients; output prices have therefore also risen. Higher turnovers should help to ease the pain of the higher energy costs. Many larger and more energy-intensive companies have also insured at least a part of their supplies against energy price increases, thus softening the blow to their budgets. However, if the situation escalates and the price surge renders the electricity traders' operations unsustainable, some might resort to breaking existing contracts. On the other hand, those businesses that are generating their own energy, especially if it is solar or wind based, are seeing their investments pay off.

Is the green transition at risk?

The recent spike in energy prices is testing the European Union's green agenda – the world's most ambitious climate targets for making economies greener and reducing the dependence on fossil fuels.

According to the Renewable Energy Directive, the overall EU renewables target as a share of gross final energy consumption is set at 32% for 2030. The Nordic-Baltic countries succeeded in reaching the targets for 2020 prior to the deadline and have proposed plans for even larger shares of renewables in 2030. These range between 65% in Sweden and 42% in Estonia, all of which are more ambitious than the target for the EU as a whole. The biggest increases in shares of renewables have been proposed by Lithuania and Denmark. On top of this, in July this year, the European Commission proposed increasing the overall EU target to 40%, even though the combined commitment by EU countries was estimated at 33.1%-33.7%; this could imply an even swifter transition. Taken together, the coming years will see a continued increase in shares of renewable energy in the Nordic-Baltic region.

[1] Dashboard on energy costs of EU industry, available at: https://ec.europa.eu/energy/data-analysis/energy-prices-and-costs/energy-costs-industry-eu-and-eu-major-trading-partners_en

The challenge in the transition period, highlighted by the current energy price crisis, is to face the fact that Europe does not have a steady and reliable energy source that meets the requirements of baseload. These requirements were previously ensured by coal and nuclear plants, but the ongoing switch to wind and solar energy is causing much more volatility in the market. Around 25% of EU's oil imports and, even more important, 45% of the transition fuel's – natural gas – imports come from Russia. The dependence on this neighbour, with whom the EU often has differences of opinion, brings its own risks.

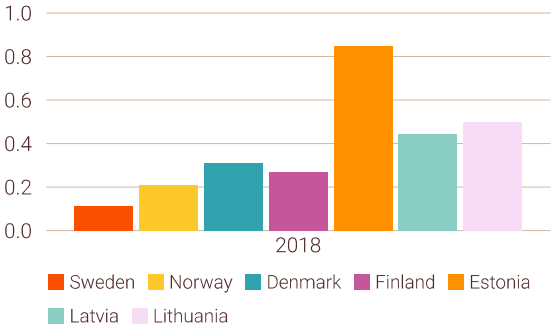
Some have argued that this energy price crisis could derail the green transition, since it highlights its vulnerabilities. But, in fact, it rather underscores the need for much larger investments in wind and solar capacities and an improved network, so that shortages in one region can be easily offset by surpluses in another. More expensive fossil energy resources make investments in green energy and energy efficiency more profitable and less dependent on subsidies, accelerating the green transition. Another hope for the future is improved options for electricity storage, which requires novel technologies and, therefore, higher investments in research and development.

The recent energy price surge can make consumers and businesses understand the importance of energy efficiency and teach smarter consumption habits, which can help in switching the mindsets to embrace less consumption in future. Going partly off the grid by powering a share of the energy needs of one's own home or business is also increasingly looking like a good idea, especially in times of such market volatility.

Throughout the switch to a greener economy, energy prices will be lifted by increased taxation, targeted at "brown" sources of energy. Furthermore, we will likely see greater volatility and larger price spikes from time to time – when supply cannot meet demand. In the long term, though, renewables should provide a cheaper source of energy for the world.

Greenhouse gas intensity

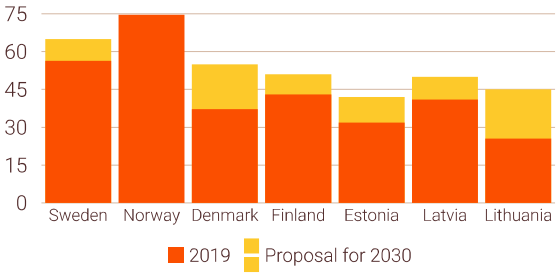
Kg CO2 per EUR of value added, total economy



Sources: Eurostat, Swedbank Research & Macrobond

Renewable energy and proposed 2030 targets

% of gross final energy consumption



Note: National energy and climate plans submitted by EU member states, based on the EU overall target of 32%.
Sources: European Commission, Swedbank Research & Macrobond

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