The energy transition – a seismic shift

Fossil fuels still play a central role in our energy supply. But these resources are limited, and growing global demand is accelerating their depletion, not to mention the serious impact that they have on our environment, such as fuelling the greenhouse effect. The energy sector has initiated a transformation, driven by the urgent need to reduce energy imports and greenhouse gas emissions and combat climate change. One of the measures being adopted as part of this process is the use of renewable energy sources. This is why investment in developing these energy sources is a key focus of the policies of Countries that are increasingly looking to promote a greener and more resilient energy system.

KEY MESSAGES

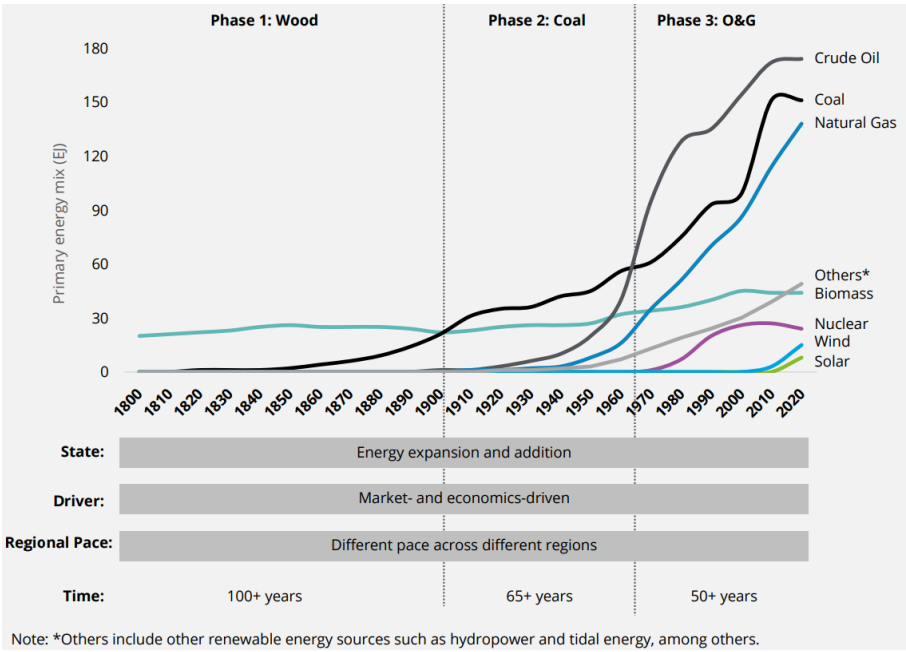
The transition from traditional fossil fuels to renewable energy sources is key.

What is the energy transition and why is it important?

The energy sector is undergoing a transformation, driven by the need to urgently reduce energy imports and greenhouse gas emissions and thus combat climate change. One of the top priorities of this process is the transition from traditional fossil fuels to renewable energy sources. But integrating these energy sources into the energy infrastructure is not without its challenges – the intermittent nature of the generation of renewable energy and the need to make significant changes to the grid to name but a few. This context has created a breeding ground for investments in innovative technologies and infrastructures that support the energy transition, which comprises several key components, including:

- knowing how to generate energy from sources considered renewable;
- updating the electricity grid, integrating energy storage solutions in an effort to address the intermittent nature of renewable energy and make it more reliable;
- expanding the use of electricity in sectors traditionally dominated by fossil fuels, such as the transport and heating sectors.

The three phases of global energy expansion:



Source: Deloitte, "From divergence to convergence: Examining the energy transition expectations of oil and gas executives and investors", October 2023

The energy industry is entering a whole new era, one which is complex and uncertain and is characterised by a process of decarbonisation spanning several levels.
Even though the transition will indeed bring with it a host of significant benefits, such as fewer emissions, energy security, economic growth and public health, there are also risks associated with changes in legislation, technological development, market volatility and infrastructural challenges. In order to capitalise on the opportunities presented by the energy transition, investors need to understand its underlying dynamics.

KEY MESSAGES

There is also a sharp increase in demand for energy storage solutions.

Investments in renewable sources on the up and up

Many governments are introducing policies and incentives aimed at promoting renewable energy and reducing carbon emissions. According to recent market analyses, the renewable energy sector has recorded significant growth, both in terms of investments in storage systems and in solar and wind energy. The integration of energy sources of this kind is expected to result in significant advances in energy storage technologies and grid modernisation.
While companies operating in the oil & gas (O&G) sector have increased their overall investments in new low-carbon energies, their contribution is still relatively modest and could be stepped up.
In 2023, the global renewable energy capacity increased by 50% compared to the previous year – an increase that was largely attributable to solar and wind energy. There is also a sharp increase in demand for energy storage solutions. There are several reasons for this, such as a reduction in the cost of storage systems, the growing integration of renewable energy systems, technological advances and public incentives to make investments (such as the American Inflation Reduction Act). The energy transition is therefore quickly revolutionising the global energy landscape.
Electric vehicles play a crucial role in this transition process. Between 2025 and 2026, China expects to see a decrease in the number of petrol and diesel vehicles on the road following the introduction of a policy to develop electric cars. This year, petrol consumption in the United States is set to decrease compared to the levels recorded in 2019 thanks to an increased market share of electric and biofuel cars. In India, on the other hand, the electric vehicle market is experiencing slow growth due to higher costs, with demand for petrol and diesel not expected to peak until 2030. In Europe, sales of electric vehicles are expected to rise significantly in the next few years on account of more stringent legislation on CO2 emissions.

KEY MESSAGES

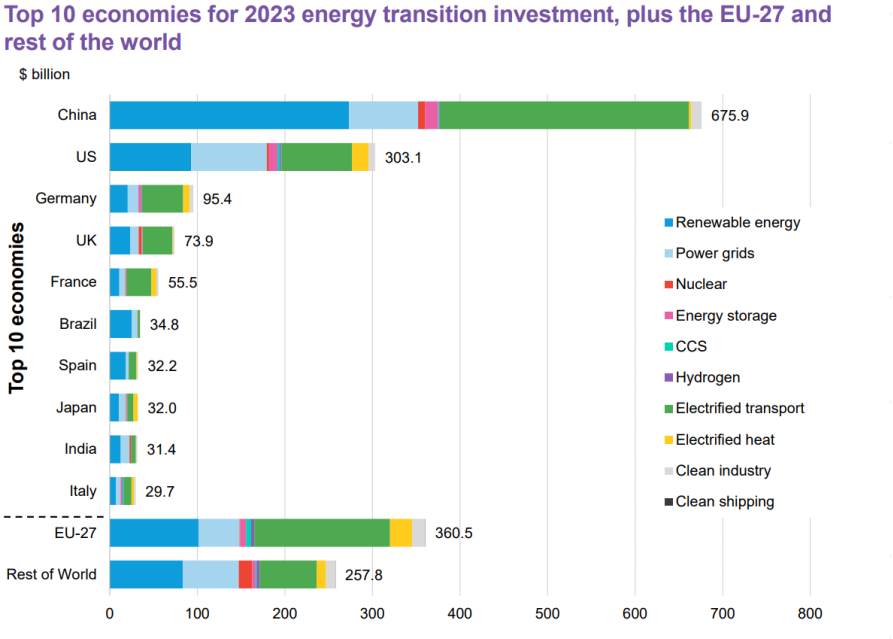
The transition towards a “net-zero” economy is a megatrend that is shaping the global economy.

Investing in the energy transition

At global level, annual investments in technologies to support the energy transition totalled 1.77 trillion dollars in 2023 – a new all-time record. In terms of spending, the electrified transport sector, which includes spending on electric cars and charging infrastructure, has overtaken the renewable energy sector, with a year-on-year increase of 36%. Excluding nuclear power, which declined slightly, other sectors recorded strong growth in investments:

- hydrogen tripled to 10.4 billion dollars;
- CCS (carbon capture and storage) almost doubled to 11.1 billion dollars;
- energy storage grew to 36 billion dollars (+76%).

While the undisputed leader in the area of investment is still China, other Countries are closing the gap. In terms of spending linked to the energy transition, despite only seeing moderate growth in 2023, China is, again, still the largest market by far. The second-largest source of funding for the energy transition is the United States, while Germany, whose investment mix is now heavily dominated by electrified transport, takes third place. Five European Countries feature in the top 10, four of which are Member States of the European Union (UE), which collectively invested more than the United States in 2023 (360 billion dollars). In the same year, the United States, the EU and the United Kingdom together invested more than China.



Source: BloombergNEF. Note: EU-27 bar also includes the EU member states shown. Rest of World is global investment excluding the EU and individual economies in the chart. CCS refers to carbon capture and storage.

Source: BloombergNEF, "Energy Transition Investment Trends 2024", January 2024

A successful energy transition promises to provide significant benefits for the environment, the economy and quality of life. The establishment of a global energy system which is reliant primarily on renewable sources will, however, be some decades in the making. In the medium term, the world will continue to rely on fossil fuels, particularly gas, to guarantee a reliable and affordable energy supply. The transition towards a "net-zero" economy is a megatrend that affects the global economy and presents an attractive investment opportunity with great potential in the long term.

The global focus on energy security has increased significantly, particularly in European Countries looking to reduce their dependence on Russia to satisfy their energy needs. With the increase in energy costs, the transition towards renewable energy has become not only the key to meeting decarbonisation targets, but also one of the ways to boost the resilience of the energy supply, reducing exposure to fluctuations in fossil fuel prices. At global level, this process will also help satisfy primary needs, such as ensuring that buildings are heated/cooled sufficiently or that there is a fair supply of energy for domestic use.

In summary, investing in the energy transition is a strategic move to combat climate change and benefit from undeniable economic benefits. This diversified and resilient investment area promotes innovation and technological progress and aligns with global sustainability objectives.

Opportunities

- *Environmental protection: the proposed investment instruments allow money to be invested in companies active in the renewable energy sector.*
- *Technological innovation: investing in funds dedicated to the energy transition enables investors to finance companies that develop innovative technologies for the production and storage of clean energy, promoting technological progress and sustainability.*
- *Long-term financial returns: the funds focused on the energy transition have the potential to generate stable and sustainable returns in the long term thanks to growing demand for clean energy and the global transition towards a low-carbon economy.*

Risks

- *Market volatility: the renewable energy market may be affected by fluctuations in raw material prices, interest rates and other economic factors, introducing a variability that may have an impact on investment returns.*
- *Regulatory uncertainty: changes to government policies may have a negative impact on the viability and profitability of renewable energy projects, creating a level of uncertainty that may affect investments.*
- *Infrastructural needs: the significant investments required to upgrade and expand energy infrastructure may come up against logistical and regulatory obstacles that increase costs and extend time frames.*

To request the full publication containing the instruments we have selected and recommended or to get more information, please fill in the form on our website (only available to residents in Switzerland).

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