ESG at Zuger Kantonalbank

Clean energy

We are conscious of our responsibility towards the environment, society and future generations. With a holistic approach, we are committed to underpinning our business with ethical principles as well as social and environmental responsibilities, thereby fostering sustainable and beneficial development. By doing so we create added value – for our stakeholder groups and for the environment.

Global demand for electricity is set to increase over the coming years. Improved technologies and lower production costs will pave the way for greater use of clean energy. This will also contribute to a more environmentally-friendly energy future.

Interest in sustainability issues has flattened off in recent months, a phenomenon that goes beyond the energy sector alone. This development can be explained by various factors, for example current geopolitical tensions or general political trends in various countries. In the longer term, however, we continue to anticipate a positive trend and persistence of this important theme. Society itself demands sustainable development – on the consumption front, but also when it comes to environmental issues. Clean energy has an obvious part to play here.

What it's about

When we use the term "clean energy", we mean the combination of the two sub-areas "renewable energies" and "smart energy" (see definition boxes). These two areas complement one another and contribute to shaping a more sustainable and more environmentally-friendly energy future.

The challenges that we need to overcome in connection with climate change and the attainment of net zero targets have to be tackled in various areas, including that of energy. Access to electricity is of paramount importance. And with the further increase in the electrification of transportation and the move away from fossil-drivel fuels generally, the need for electricity will only rise further. It should also be noted that energy production currently accounts for the largest share of all the world's CO_2 emissions, namely just under 40%. This may be viewed as an additional incentive to further promote the use of renewable energies – such as solar and wind – and accelerate the transition to a net zero society.

Despite the current momentum of energy transition, the world is still far from being on a trajectory that would be compatible with its climate targets. According to the International Energy Agency (IEA), the political status quo (Stated Policies Scenario; see graph), which entails future energy development based on current political parameters and the political measures announced by governments, will still lead to a global rise in average global temperatures of 2.4°C by 2100, which would entail serious risks to the climate.

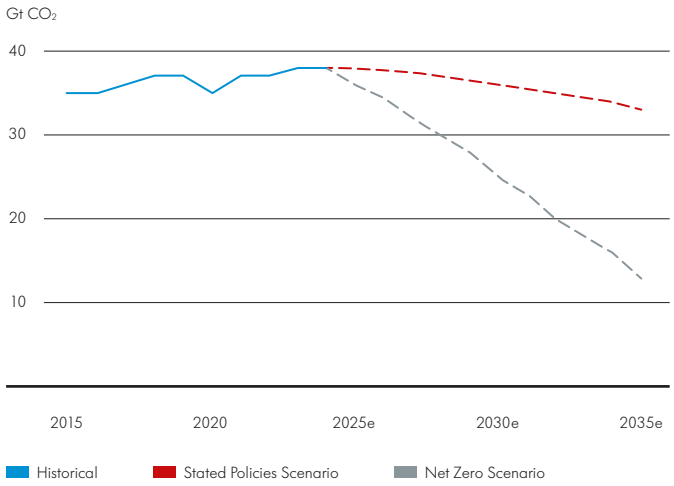
Renewable energies

This term encompasses all forms of energy that are regenerative – in contrast to fossil energy fuels – and therefore available to an almost unlimited extent. These primarily comprise solar energy, wind energy, hydro power, geothermal energy, and energy from the use of biomass. Renewable energy sources are considered a key pillar of a sustainable energy policy and the world's energy transition, as they produce no (or only very low) volumes of greenhouse gases.

Smart Energy

By this term we understand all facets of the underlying technologies that are necessary to produce, store, distribute, and consume renewable energy. This includes themes such as smart grids (intelligent power networks), efficient energy management, forms of battery storage, etc. A key factor here is an increasingly decentralised energy supply structure involving local, renewable energy sources.

Global energy-related CO_2 emissions

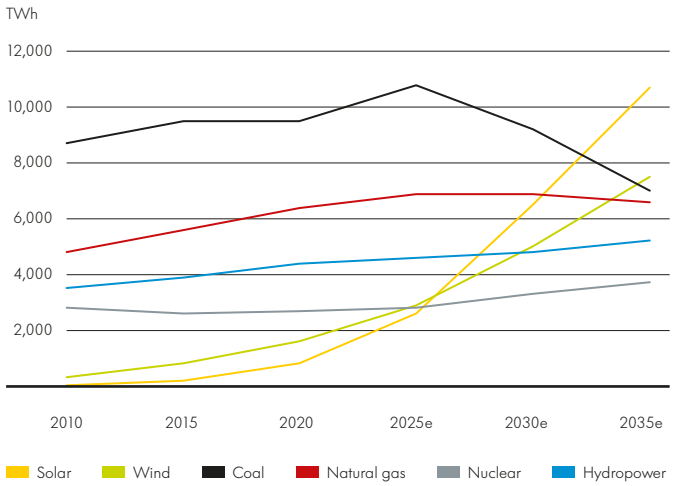


Source: IEA (2024), Global energy-related CO_2 emissions in the Stated Policies and Net Zero Emissions by 2050 Scenarios, 2015–2035, IEA, Paris. https://www.iea.org/data-and-statistics/charts/global-energy-related-co2-emissions-in-the-stated-policies-and-net-zero-emissions-by-2050-scenarios-2015-2035, Licence: CC BY 4.0

Global electricity consumption

According to the IEA, global electricity production amounted to some 30,000 TWh in 2023, which was primarily made up of the following sources: coal with a market share of 36%, followed by renewable energies (30%), gas (21%), nuclear energy (10%) and oil (3%). Looking ahead, the International Energy Agency expects a significant rotation in energy market shares over the coming decade. This year alone, renewable energies combined are expected to claim the largest share of the market, pushing coal down the rankings. This development is expected to continue over the coming decade (see graph).

Global energy production: solar and wind advancing



Source: IEA (2024), World electricity generation in the Stated Policies Scenario, 2010–2035, IEA, Paris. https://www.iea.org/data-and-statistics/charts/world-electricity-generation-in-the-stated-policies-scenario-2010-2035, Licence: CC BY 4.0

Whereas solar and wind energy are witnessing particularly strong increases and are likely to be the areas with the highest market shares by 2035, coal in particular is expected to undergo quite a slump as a source of energy production.

Multifaceted benefits

Investment in clean energy leads to an array of benefits for both individuals and society. The key aspects encompass:

- **Sustainability:** The promotion of renewable energies reduces the burden on the environment and is conducive to a more sustainable future.
- **Lowering of CO_2 emissions:** Clean energy sources are almost emission-free, which makes them valuable solutions to the problem of climate change.
- **Resources:** Unlike fossil fuels, renewable energy sources are unlimited in terms of supply and do not burden the environment through mining or other extraction techniques.
- **Reduced dependency:** The use of local energy allows countries to reduce their dependency on imported fossil fuels.
- **Diversification:** Broadening the spectrum of energy sources increases energy security and stabilises energy supply.
- **Air quality:** The use of clean energy sources reduces air pollution, which has positive repercussions for health.
- **Innovation:** Investments in clean energies encourage technical innovations, which can lead to greater competitiveness in global markets.

There are various reasons why solar and wind energy are in a position to record the strongest gains in electricity production over the coming years. For one thing, the corresponding technologies have improved significantly over the last few years, resulting in lower costs together with an increase in efficiency. The lower costs involved in producing electricity from solar and wind energy put them in a much better position to compete with the costs of extracting fossil energy fuels. In addition, in contrast to fossil fuels, sun and wind are available in unlimited supply, and can be harnessed all over the world. Moreover, both these energy sources are almost emission-free, which makes them valuable solutions to the problem of climate change. These aspects explain why many governments around the world have been promoting renewable energies in recent years through subsidies, tax relief measures, and political parameters as they seek to accelerate the transition to a more sustainable energy supply while at the same time increasing energy supply security.

What does this mean for investors?

The world's need for energy will continue to rise. This makes it all the more important and indeed right that renewable energies will attract an important share of the energy market while fossil fuels continue to lose ground. Companies that specialise in clean energies or related areas are in a position to benefit from positive long-term developments. For further information on investment solutions, please contact your Zuger Kantonalbank advisor.

Publications

Other publications on the subject of ESG can be found on our web page www.zugerkb.ch/en/esg.

We are signatories to or members of the following organisations

Signatory of:

PRI PRINCIPLES FOR RESPONSIBLE INVESTMENT

Swiss Sustainable Finance

ASSET MANAGEMENT ASSOCIATION

Contact

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Wir begleiten Sie im Leben.