



Transition to a Low-Carbon Economy: How it Impacts Investors and the Sectors They Invest In

Preview Executive Summary

At COP 21 (COP stands for the "Conference of the Parties") in 2015 in Paris, over 190 countries agreed to address the risks of global warming, limiting the global temperature rise to a maximum of 2 degrees Celsius (2°C) above pre-industrial levels. As the timelines associated with forecasts become current, different developments will shape the situation investors face:

- 1. Discrepancy between decarbonisation commitments and required actions to achieve the transition.
- 2. The various structures of a low carbon economy and reliance on different technologies.
- 3. Continued subsidies for fossil fuels in many markets.

Three underlying opportunities exist to address low-carbon objectives: *improving energy efficiency, reducing carbon intensity of electricity* and *end-use of energy*. Climate change and decarbonisation are having wide-ranging impacts on all industry sectors, but the impacts will vary in their severity, duration and imminence. Key sectors responsible for a high share of direct emissions are electricity and heat production (25%), agriculture, forestry and other land use (AFOLU)

(24%), industry (21%), transport (14%) and buildings (6.4%)¹. Progress in key technologies needed for the low-carbon transition as tracked by the International Energy Agency (IEA) has so far been insufficient, with many sectors currently failing to develop or deploy the necessary technologies.

Investors can take several steps to manage their exposure to the transition to a low carbon energy transition:

- 1. **Evaluate progress towards low carbon economy:** Observing the essential insights provided by sectors, countries or regions on their expectations for future developments.
- 2. **Monitor technology exposure:** Monitor not only the sector but also technology exposure of investments to manage alignment with key areas of potential future innovation.
- 3. Assess companies' preparedness to manage risks and capture opportunities: An analysis of companies can reveal their preparedness to manage a low carbon transition.

This will allow investors to manage risks and be positioned to take full advantage of the low carbon transition.

The complete document is available online: https://www.feri-institut.de/media-center/studien/



COGNITIVE CONCLUSION Transition to a low-carbon economy: Key strategies for investors

Key strategies for investors

Evaluate overall progress towards low carbon economy

Monitor technology exposure

Assess companies' preparedness to manage risks and capture opportunities



Global Warming & Climate Goals

- Paris Agreement to limit global temperature rise to maximum
 2°C above pre-industrial levels
- Physical affects of global warming being seen in varying weather patterns increased severity and number of natural disasters



Key Emission Reduction Levers

- Improving energy efficiency
- Reducing carbon intensity of electricity
- · Addressing end-use of energy



Main Sources for Direct Emissions

- Electricity & heat production
- Agriculture, forestry & land use (AFOLU)
- Transport
- Industry
- Buildings

Sources of uncertainty:

- 1. Discrepancy between decarbonisation commitments by countries and required actions to achieve transition.
- 2. Variety of structures of a low carbon economy and competing technologies.
- 3. Continued subsidies for fossil fuels in many markets.

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