

An energy boost for your portfolio

Senior Portfolio Manager Thiemo Lang explains why Smart Energy is more attractive than ever and highlights key opportunities in the sector.

What does smart energy mean to you, and why is it an attractive investment area?

For us, smart energy means making our energy supply more sustainable through the use of new technologies, processes and production methods. On the supply side, this means increasing the production of renewable energy sources and ensuring their efficient transfer and storage, and on the demand side this means the more efficient use of our energy resources.

While the extraction costs for conventional energy sources continue to increase, the production costs for new, alternative energy solutions have been declining each year. End-users are now increasingly witnessing the cost benefits of switching to renewable energy sources and energy efficient solutions as these develop into self-sustained markets.

How do you go about finding suitable companies for your portfolio? What role do sustainability criteria play?

We have identified approximately 250 companies that fit into one of our four investment clusters: renewable energies, distributed energy systems, energy efficiency, and natural gas. From this pool of potential investment opportunities, we identify the companies that we believe to be the most promising in terms of market position and growth potential and invest in them if our own financial models detect upside potential. Sustainability factors are an integral component of our financial analysis and influence the fair value we calculate for the companies.

Some skeptics would argue that developing and deploying renewable energy sources to reduce CO₂ emissions is costly and driven by ideology. How do you address such arguments? What role can new energy sources and improved energy efficiency play in meeting the world's growing energy needs?

The importance of renewable energy sources and energy efficiency is certainly not limited to their contributions to climate change mitigation. For major net energy importers such as Western Europe, increasing energy security is of even greater importance. The EU currently imports around 50 % of its energy needs. This amounts to about EUR 400 billion or 3 % of the EU's economic output. Germany alone spends EUR 90 billion on oil, gas and coal imports each year.

In addition, renewable energies depend less and less on any forms of subsidies. This is particularly true for the solar sector. And we are only in the early stages of building a new, autonomous energy infrastructure that increasingly draws from renewable energy sources and includes intelligent energy management and state-of-the-art storage technology.

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And in the area of energy efficiency, the total cost of ownership calculation is already favorable for many applications: The somewhat higher upfront expenses are more than offset by the subsequent decrease in energy costs, as can be observed in the area of efficient lighting with LEDs, for instance.

Where exactly is the solar industry creating opportunities?

Production costs for solar power have declined considerably and solar power is becoming increasingly competitive without subsidies in certain regions. The US solar industry is booming right now. For instance, in Texas, new solar projects for 0.05 US cents per kilowatt-hour are being projected. We hold shares in US module manufacturers and in project companies such as SunEdison, SunPower and First Solar, which has just issued a very ambitious road map for further cost reductions.

What opportunities do you see in energy storage?

Energy storage is about more than just decentralized energy storage for households that produce their own clean energy. The stabilization of power grids and e-mobility are equally important. The fluctuations in solar and wind energy production result in daytime power surpluses. For companies active in the storage business, I can envision business models in which they would buy up surplus electricity at a low price during the day, store it temporarily and then sell it for a higher price in the evening.

We consider energy storage to be very attractive. Samsung SDI is expected to profit from the launch of the upcoming plug-in hybrid cars. Currently, they already deliver the batteries for the electric vehicle BMW i3. Other positions in this sector are lithium mining company Rockwood Holdings, the Taiwanese battery-pack developer Simplo Technology and, in the area of stationary storage, battery companies EnerSys and Saft.

What role can power-to-gas technologies play in meeting our energy storage needs?

We believe that power-to-gas holds the key to seasonal storage of surplus renewable energy. Therefore, we are closely following current developments in this area. Power-to-gas uses water electrolysis to produce hydrogen from electricity that has been generated with renewable energy. The hydrogen is then fed into the natural gas grid. Power-to-gas and the reverse mechanism through the fuel cell are on the verge of commercial deployment in many areas including the production of industrial gases, seasonal storage, or fuel cell cars. Publicly-listed companies in this sector are still rather volatile. Therefore, we currently have only a limited exposure to companies such as Hydrogenics, FuelCell Energy and Ballard Power Systems.

Your strategy also invests in natural gas – how sustainable is this energy source?

Natural gas is an important component of our strategy, as it is the cleanest form of fossil fuels. And it complements intermittent renewable sources well, not only because of its potential as a storage medium for surplus electricity through power-to-gas, but also particularly because of complementary energy production for renewable energies. We hold shares of natural gas suppliers such as Spectra Energy, Sempra Energy and APA Group in the portfolio.



The strategy currently places greater emphasis on energy efficiency than energy storage. Why?

Yes, energy efficiency makes up the largest component of the strategy at 40 % of the portfolio. It is followed by renewable energies, natural gas suppliers and energy transmission and storage, each of which makes up 20 % of the portfolio. The energy efficiency sector offers the largest variety of investment options, including efficient building technologies / lighting (LEDs), industry and transport.

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What are some of the most interesting segments within the efficient lighting sector?

In addition to investing in the makers of LED chips such as Epistar and Osram, we also invest in system integrators. Right now, entire cities are converting their street lighting systems to LED technology. This will lower electricity costs by 60 % compared with conventional lighting systems. Maintenance costs can also be reduced thanks to smart, central system monitoring.

What role do technology companies play in the energy sector?

In the IT sector, we are really interested in areas such as power management of semiconductor chips and fast charging devices for tablet computers. The objective is to reduce the electricity consumption of smartphones and tablets. We have invested nearly 10 % of the portfolio in the subsector of semiconductor power management. Our portfolio includes the shares of Dialog Semiconductor, a German company that supplies Apple, among others, and the US companies Monolithic Power, Power Integrations or ON Semiconductor.

Information technology is playing an increasingly important role in the efficient monitoring and management of energy flows, be it for networked LED street lamps, smart grids, or in new applications such as home automation. We are paying close attention to these new developments and intend to reflect them in the portfolio accordingly.

Which companies are currently doing a particularly good job of establishing themselves in the energy market and why?

Among producers of solar cells and modules, Asian manufacturers from China and Taiwan will likely maintain a strong position. In the project development business, US firms such as SunPower, First Solar and SunEdison are currently performing very well. Among solar companies, Wacker Chemie, a market leader in the production of the high-purity feedstock material polysilicon, remains very interesting. We expect prices in this subsector to remain stable as demand continues to grow. The wind power sector is also showing a positive trend. Following the restructuring efforts over the last few years, companies such as Vestas, Gamesa and Nordex are reporting rising margins once again.

The industrial automation and energy generation and transfer sectors also continue to be interesting for us. They include more traditional companies such as ABB, Emerson Electric and Prysmian. Finally, we've rounded out the portfolio with positions in several utility companies, from renewable energy power plant operators and electric grid operators to natural gas suppliers.

What is the investment horizon for investors in alternative energy?

The energy sector will face major changes in terms of energy production and efficiency, and these developments will keep us occupied for at least the next one to two decades. Against this backdrop, the strategy is geared toward mid- to long-term investors who are interested in this topic and want to generate the best possible returns in this exciting sector over the next few years.



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