ROBECOSAM

We are Sustainability Investing.

Fund finishes a very successful year on a strong note

- Lessening trade worries propel equity markets higher
- Positive performance contributions notably from growth-oriented companies
- Worldwide CO_2-reduction efforts should benefit portfolio

Annual Review 2019
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Market review and development

Despite economic and political headwinds, 2019 developed into an outstanding year for equity investors. The MSCI World Index increased by more than 30% (in EUR) and closed at a new record level. Markets received strong support from central banks which adjusted monetary policy during the year to compensate for the slowdown in global manufacturing production. The Fed began the year with a surprised suspension of anticipated interest rate hikes, but then even decided on three rate cuts as the year progressed. Even more aggressive was the ECBs policy stance that lowered rates to historic lows and saw the re-initiation of its bond purchasing program.

The global economy grew modestly but lost some momentum, especially in Europe and China. Purchasing Manager Indices softened in the first half of the year, temporarily raising concerns of an approaching recession. Still, a turn-around in industrial activity in Q4 as well as continued robust consumer spending supported investor confidence.

An escalation of the trade dispute between China and the US remained a constant theme throughout the year. New tariffs were implemented in several tranches with even higher tariff rates threatening. In the end, both parties returned to the negotiating table agreeing to a so-called "phase-one" deal which includes higher Chinese imports of US agricultural and energy products.

During the course of the year, the fund increasingly attracted the attention of investors, also due to increased public awareness on the negative effects of climate change, resulting in a search for solution providers. Political progress aimed at reducing worldwide CO_2 emissions has gained traction globally, reflected in more initiatives on clean energy production and energy efficiency solutions, which are at the very core of the Smart Energy investment case.

Periodic performance comparison (in EUR terms, gross), December 2019

	1 YR	3 YR pa	5 YR pa	Inception pa*
RobecoSAM Smart Energy Strategy	45.48%	16.09%	13.56%	9.62%
MSCI World	30.02%	10.25%	10.38%	8.09%
relative to MSCI World	15.46%	5.84%	3.18%	1.53%

*23.09.2003

Performance

All four of the fund's main investment clusters contributed positively to performance in 2019. Particularly strong were the contributions of the energy efficiency and energy management clusters. Growth-oriented companies contributed strongly and included semiconductor companies focused on efficient power management as well as those focused on the efficient processing of big data. Contributions from these companies were most pronounced towards the latter part of the year. More muted was the performance contribution of the more defensive natural gas distribution sub-cluster due in part to interest rate sensitivities of infrastructure intensive industries.

On an individual stock level, US-based, Xilinx, maker of programmable logic devices, was the biggest contributor to fund returns. The fund took profits and sold positions at the beginning of the year on the back of significantly strong performance as well as in anticipation of negative repercussions from exposure in China and what was considered over-stretched, short-term valuations. Following a reset of expectations, the position was strengthened again towards the end of the year. Xilinx is expected to have enduring influence across all aspects of big data applications including data centers, artificial intelligence, autonomous driving and wireless 5G for many years to come.

The second most important performance contributor during the year was Varta, a manufacturer of batteries for wearables and hearing-aids. The company had stellar performance in 2019 amid announcements of new product "design-ins" and further production capacity increases. As valuations looked increasingly stretched in the second half of the year, a good share of the holdings were sold at considerable profit.

The Canadian wind farm operator Pattern Energy profited from a take-over bid. As a consequence, the company was sold. Other positive performance contributors during the year came from the power semiconductor company ON Semiconductor (US), the thin-film solar manufacturer First Solar (US), as well as industrial internet-of-things play Silicon Labs (US).

Given overall solid markets, the impact of negative performance contributors was limited. The US-based natural gas distribution company UGI suffered a correction based on disappointing September 2019 numbers and 2020 guidance. Performance of other natural gas distribution companies were also weaker due to lower, weather-induced demand and interest rate sensitivity.

During the course of the year, fund management continued to flexibly seek exposure to companies with the perceived best risk/return profile, whilst not refraining from taking profits in companies or even whole sub-sectors whenever the market's short-term expectations exceeded our own. For example, the exposure to select semiconductor companies was increased again in the latter part of the year as the cycle bottomed-out, with inventory levels stabilizing whilst companies were under-shipping real-demand.

Company examples include power semiconductor companies like ON Semiconductor, companies with high exposure to the transportation and industrial efficiencies sectors like Analog Devices, Maxim Integrated, and NXP Semiconductor as well as the programmable logic device manufacturer, Xilinx. On the other hand, meaningful positions that were sold entirely include Cree, Osram Licht, Algonquin Power as well as Qorvo.

Cluster attribution	Start weight	End weight	Total return
Energy Distribution	**21.4%**	**19.7%**	**22.9%**
Electric Networks	2.1%	4.3%	28.0%
Equipment Suppliers	7.0%	4.4%	65.4%
Natural Gas Distribution	12.3%	11.0%	8.3%
Energy Efficiency	**37.7%**	**45.3%**	**47.8%**
Buildings	5.4%	4.8%	49.4%
Industrial processes	10.7%	14.5%	45.3%
Transportation	12.3%	13.2%	39.7%
Big Data	9.3%	12.8%	54.8%
Energy Management	**24.5%**	**20.7%**	**70.9%**
Energy Storage	2.8%	2.1%	102.2%
Semiconductor Power Management	21.7%	18.6%	66.0%
Renewable Energies	**15.7%**	**11.2%**	**63.7%**
Renewable Power Producers	9.1%	5.8%	60.3%
Solar	5.0%	5.4%	65.3%
Wind	1.5%	0.0%	35.0%
Cash	**0.8%**	**3.1%**	

Market Outlook

Recent economic confidence data show further signs of stabilization with consumer and business sentiment if not improving at least not deteriorating. Further progress in US-China trade talks should also give additional support. Moreover, expansive monetary policy from central banks globally remains assured which should further support current stock market levels.

Fund management remains constructive on the outlook for companies within the clean and renewable energy sectors as defined by the fund strategy. Public pressure continues to intensify, and governments and regulatory authorities are taking more decisive actions to reduce CO2-emissions. We expect a number of long-term, global trends within energy demand and supply to develop. The future of energy supply will increasingly be based on electricity generated through renewables like solar and wind. The share of renewable energies as a percentage of global energy consumption will also increase, driven by not only environmental concerns but also economics.

The strongest growth within renewable energy supply will be from on/offshore wind and solar power generation driven by high efficiency and low production costs. Solar power has the advantage of being locally deployable which further reduces transmission and infrastructure costs. We remain skeptic regarding the scalability of other forms of renewable energy provision like biomass given its low conversion efficiencies as well as potential conflicts and debate surrounding resource inputs for food versus inputs for fuel.

Hydrogen and other e-fuels are over time likely to complement batteries as a means of storing electricity and increasing grid flexibility. However, even here, electricity will still need to be sourced in order for hydrogen and e-fuels to being generated (through electrolysis of water). Furthermore, the next few decades will see a big shift towards electrification in two highly consuming energy sectors, namely transportation and building.

In light of these long-term assumptions and outlook, the fund aims to seek maximum exposure to the whole value chain of electrification which includes:

a) Power Generation: This includes both upstream solar/wind equipment manufacturers as well as downstream power generation utilities.

b) Energy distribution/ energy management: Once generated, it becomes very important to minimize the energy transmission and conversion losses till the electricity is finally consumed in the end application. The use of temporary or seasonal storage units, the reversal of electricity flows and the growth of distributed network control centers all add layers of complexity to the energy management system. Companies that have developed power electronics solutions to optimize power conversion efficiencies (e.g. high-/mid-voltage conversion, AC/DC), or have developed the necessary software and automation overlay for the smart monitoring and/or control of the energy flows will play a key role.

c) **Energy efficiency / energy consumption:** As electricity approaches its final destination, additional voltage/current fine-tuning will be necessary to fit to the specification of the end device. The sheer amount and diversity of electricity consuming devices is stunning and encompasses applications in buildings (e.g efficient lighting, air conditioning, building management), industrial processes (motors, powertrains), consumers (white goods, consumer electronics), transportation (motors, drives), and data centers / communications (energy efficiency of big data).

The common challenge for all these applications is the necessity to reduce conversion losses as much as possible, thereby minimizing any conversion heat and electricity consumption. This will be increasingly critical as energy hungry sectors of transportation and building heating go electric, possibly putting more strain on the power supply.

To summarize, as the energy sector goes "smart" and electric, the fund will continue to invest strongly in technology-oriented companies that have the knowledge to efficiently deal with power and data. Investing in the electricity sector of tomorrow is much less about investing in rapidly commoditized sub-sectors, but rather about focusing on highly-specialized companies with high barriers of entry, delivering substantial value to their customers by offering more powerful and efficient solutions in the addressed sub-segments.

Contact
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