BBGI Group SA – Place de Longemalle 1 – 1204 Geneva - Switzerland
www.BBGI.ch

BBGI CLEAN ENERGY 100 USD INDEX AND STRATEGY

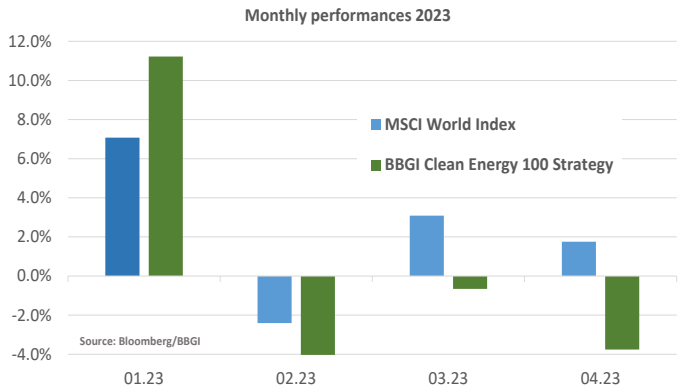
A BBGI Exclusivity since 1999

April 2023

Annualized performance of **+11.03%** since 1999

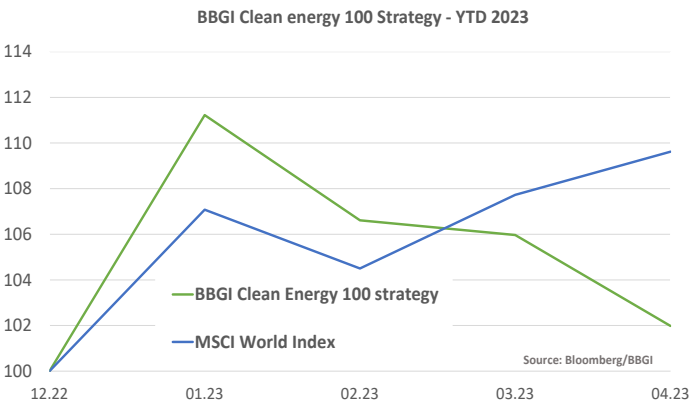
Further correction in the renewable energies segment

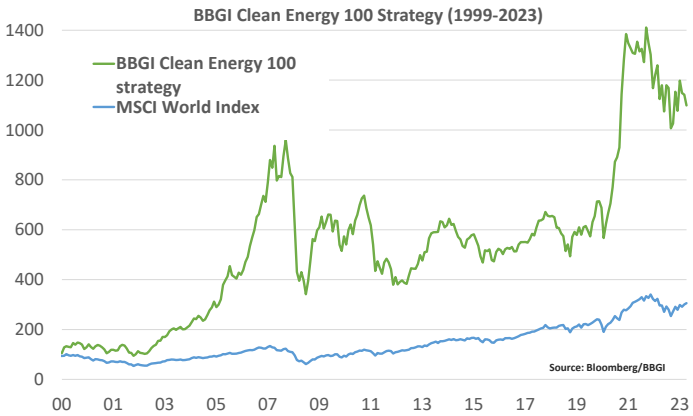
	April	YTD
BBGI Clean Energy 100 strategy:	**-3.76%**	**+1.98%**
BBGI Solar Sector:	**-3.96%**	**+4.08%**
BBGI Wind Sector:	**-2.67%**	**+4.60%**
BBGI Biofuel Sector:	**-6.12%**	**-17.29%**
BBGI Energy efficiency Sector:	**-3.48%**	**+3.75%**



The Clean Energy 100 strategy corrected in April (-3.76%). Indeed, all four sectors making up our Clean Energy approach declined this month. The energy efficiency segment lost -3.48%, the photovoltaic industry fell -3.96%, bioenergy lost -6.12% and the wind power industry corrected by -2.67%.

Enphase and ***First Solar*** succeeded in increasing their sales by over 45% in the first quarter, while maintaining their leading market positions and ambitious forecasts for 2023, although concerns about US residential demand seem to be worsening due to high interest rates and more general worries about the banking sector. Nonetheless, we believe that solar power will remain the fastest growing energy segment, with panel installations set to increase by between 25% and 40% worldwide this year. Full order books for turbine manufacturers, rising profits on the horizon. Falling steel prices (by around 35% over the past year) could enable our peer group of wind turbine manufacturers to recover and increase margins. Net-zero energy targets and legislation are likely to increase installations to 140-190 gigawatts per year by 2027, which is a positive development for ***Vestas***, ***Nordex*** and other wind turbine manufacturers. The fundamentals of renewable energies remain very good, despite fluctuations in stock prices that are sometimes poorly correlated with actual industry trends.





The systematic diversified strategy of the BBGI Clean Energy 100 Index has produced an annualized return of +11.03% since 1999 against +4.90% for the MSCI World

Comments by sector:

Solar: -3.96%

Solar panel manufacturers may see the effects of seasonality in first quarter results, but median sales for the companies that make up the solar segment of our strategy could still rise by around 33% this year. While inverter manufacturers may have led the way, module producers look set to benefit from robust demand for solar power, which is expected to grow by 25% to 40% in 2023. Double-digit sales growth for solar panel manufacturers could continue this year, with ***Enphase*** and ***FirstSolar*** growing by over 45% in the first quarter. Our outlook is based on strong growth in solar demand and favorable legislation, which could propel revenues beyond the 2023-2025 consensus. Indeed, a closer look at First Solar's Q1 figures shows that margins have improved significantly (20%) since the logistically challenging year 2022. We now believe that full-year margins of 30% are achievable thanks to this restructuring and a strong order book (sales up +49% in Q1).

Biofuel: -6.12%

Honeywell International Inc. and ***Summit Agricultural Group*** are teaming up to build the world's largest ethanol-based aviation fuel plant, a project that is set to become a billion-dollar facility and open in 2025. According to Summit Agricultural, the plant will eventually produce enough jet fuel to power thousands of flights every year. The facility will be located on the U.S. Gulf Coast and will use Honeywell technology to transform ethanol into sustainable aviation fuel, known as SAF. Simultaneously on the other side of the Atlantic, Alfanar and the N+P Group announced a partnership to create a ***"waste to aviation fuel"*** plant. This plant will utilize the amount of waste produced by the city of Birmingham and the West Midland region (around 1 million tons/year). This waste will be used to create feedstock pellets that can be used to produce green aircraft fuel, also known as ***"sustainable aviation fuel"*** (SAF) at Alfanar's Lighthouse Green Fuels plant in Teesside, which is due to be operational in 2028 and will create over 1,000 jobs during construction, before employing 240 local people once operational. Overall, this unique integrated solution will produce SAF that can be used in today's aircraft engines and refueling infrastructure without modification. It will produce 165 million liters of SAF, equivalent to 2,500 long-haul or 25,000 short-haul flights a year, meeting 10% of the UK's 2030 SAF target.

Energy Efficiency: -3.48%

The best performer of the quarter in our energy efficiency segment was the American company ***EnerSys***, whose share price soared by +17.5% at the start of the year, and which looks very promising. The company, which is a world leader in industrial battery storage solutions, announced earlier this month that it had acquired ***Industrial Battery and Charger Services***, another leader in the battery and maintenance sector. This acquisition represents a considerable strategic advantage for ***EnerSys***, which thereby expands its offering and presence in the UK. The company has also delivered some very good figures for fiscal year 2023, with record revenues of 990mio in Q4 (+9% YoY) and operating income for 2023 of 278M (+35% YoY). The company, which has the wind in its sails, was also awarded the ***"Better practice award"***, which is given to companies that demonstrate innovative behavior and lead the global decarbonization project through their actions.

Wind: -2.67%

Falling steel prices (around -35% since peaking in March 2022) could lead to a turnaround in our peer group of wind turbine manufacturers, resulting in a recovery in margins. Net-zero energy targets and legislation are likely to increase installations to 140-190 gigawatts per year by 2027, which will have a positive effect on sales for ***Vestas***, ***Nordex*** and their peers. We can see this when we look at the first quarter figures for Vestas, for example, whose EBITDA came back to 236 million (-20 million Q1 2022) thanks to the general rise in prices and simultaneous fall in material costs, which could push EBITDA over the year beyond 1 billion if the trend continues. The order book is also filling up, and momentum is building in the USA in particular (currently 2.1GW, compared with 850 megawatts a year ago). In addition to more robust turbine sales, Vestas' service division, which posted a +27% increase in revenues in 2022, is likely to be the main driver of revenue and margin growth in the years ahead. Total sales could increase by around +16% in 2023-26, against a consensus of just 11.5%. Ebitda could grow at an even faster pace than the manufacturer's loss in 2022.