

BBGI CLEAN ENERGY 100 INDEX

USD

A BBGI exclusivity since 1999

December 2021

After a year of consolidation, 2022 could present many new opportunities

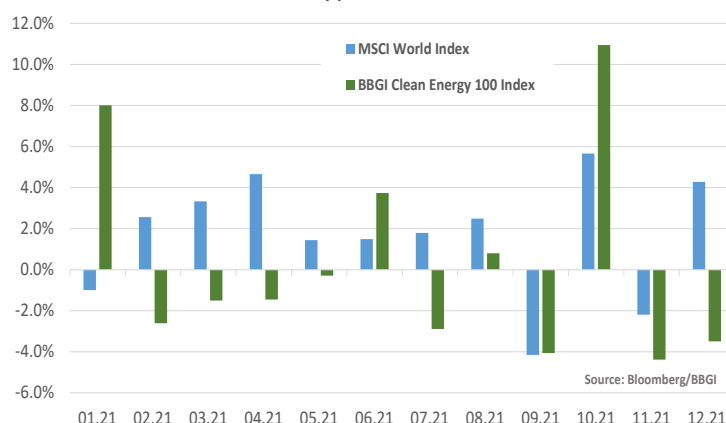
	Dec	YTD
BBGI Clean Energy 100 Index :	-3.49%	+1.57%
BBGI Solar Sector :	-8.54%	-0.69%
BBGI Wind Sector :	-4.07%	-18.37%
BBGI Biofuel Sector :	-0.99%	+21.21%
BBGI Energy Efficiency Sector :	-0.64%	+4.31%

Developments in the indices :

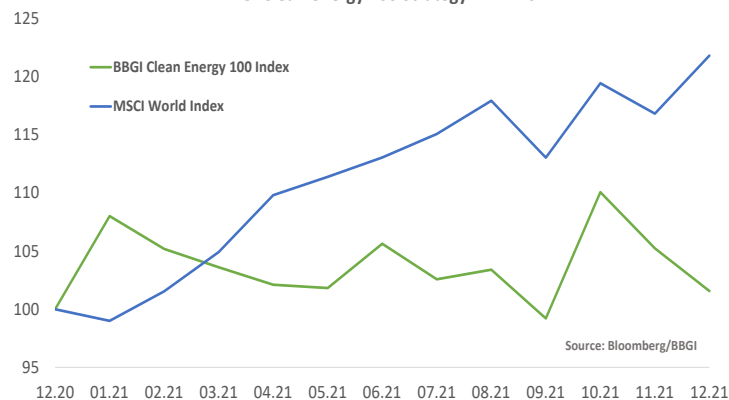
The year 2021 will have been a period of consolidation for renewable energies after a year of spectacular growth in 2020. As a result, the BBGI Clean Energy 100 index only slightly appreciated by 1.57%. In the last month of the year the sector experienced a contraction of -2.46%. In 2021, there were several short-term factors that made renewable energies globally less attractive to investors. A very substantial rise during 2020 has naturally created an environment favourable for profit-taking by medium-term investors with a short-term view of the sector. Added to this is the expectation of rate hikes by the U.S. Federal Reserve, which would increase the costs of borrowing capital. This rate hike mechanism is seen as particularly negative for highly debt-ridden projects such as those in renewable energy infrastructures. Nevertheless, the long-term underlying fundamentals of the various industries that constitute our Clean Energy 100 strategy have not experienced any deterioration. On the contrary, more and more signals are strengthening this theme, the year 2021 was the first year since the Paris agreements in 2015 to account for more investments into green bonds than those resulting from fossil fuels and hydrocarbons. The year 2022 could represent an opportunity to enter a market that has been experiencing very high valuations which have progressively returned to more acceptable valuations.

The price of carbon has continuously increased in 2021. In December, they finally exceeded the 80 euros/ton threshold for the first time in their history. The price of this asset has more than doubled in the last year. A stabilization at very high levels could represent a major brake on European industrial activities that emit CO₂, such as metallurgy and refineries. This bullish rally also corresponds to the European plan to reduce emissions by 55% by 2030. In our opinion, these economic and political factors strengthen the argument for investing in the renewable energy sector after this year's significant consolidation.

Monthly performances 2021



BBGI Clean energy 100 Strategy - YTD 2021



BBGI Clean Energy 100 Strategy (1999-2021)



The systemically diversified strategy of the BBGI Clean Energy 100 Index has generated annualized returns of +12.37% since 1999 to date.

Comments by sector :

Solar : -8.54%

The price evolution of the various companies composing our solar energy sub-index has been rather neutral over the year 2021 (-0.69%). Following a spectacular growth of more than **100% in 2020**, the stocks prices of companies in the photovoltaic industry have stagnated, except for some poly silicon producers which have greatly taken advantage of the increase in the price of this raw material. This commodity has in fact seen its market price triple during the year. This dynamic has greatly contributed to the successful growth of companies such as **REC Silicon** or **Wacker Chemie** in 2021. On the other hand, some module manufacturers suffered double-digit losses like Canadian Solar. This disappointing overall performance occurred despite growing demand. Indeed, the number of installations has increased by +25% this year. These various contractions have caused valuations of companies in the industry to deflate to attractive levels. We note that the sector's EV/Ebitda ratio is now around 11.2x, which brings it back in line with the MSCI ACWII which stands at 12x. The industry's P/E ratio has also returned to near normal levels. At the very beginning of the year, it was around 31x, but is now down to 20.5x, slightly above the average valuation of world stocks which stand at 18x. These relatively high ratios reflect investors' expectations for the coming year. Sales projections for the year 2022 are +19%. The best performer in our solar segment is the Chinese company "**Flat Glass Group Co., Ltd**" (+15.78%).

Biofuel : -0.99%

The value of the companies included in the biofuel's sub-index have increased by approximately +20% during the year 2021. The support for this increase came from the higher demand for fuel as a result of the massive vaccination campaigns. The responsiveness of ethanol and biodiesel companies was a considerable asset during the pandemic. Indeed, the growth of other sectors adjacent to biofuels such as industrial alcohols and protein-rich by-products have contributed significantly to the successful performance of the sector during this period of weakening consumer demand. This diversification has also accelerated the transition of some ethanol producers to higher value-added products such as renewable diesel. In 2022 this market demand is anticipated to further normalize as travel restrictions are eased. Biofuels are essential to the decarbonization of transport in the medium term, as the majority of light vehicles over the next decade or so will continue to be combustion powered vehicles. Ethanol can bring reductions of 30% to 50% in emissions and will play a major role in countries like India and China. The best performer of the month in our Biofuel sub-index was the biotechnology company, **Novozyme A/S** in Denmark, which saw its share price rise by +8.11%.

Energy Efficiency : -0.64%

In the energy efficiency segment of our main index, the best performer of the month is the Korean company "**Seoul Semi Conductor Co., Ltd**". The Korean LED producer saw its stock price appreciate by +12.16% during the month of December. The Korean company is the second largest LED producer in the world and has advanced technology. Recently, the Korean company announced the WICOP ADB (Adaptive Driving Beam: Intelligent Headlamp), which improves the visibility of oncoming vehicles or pedestrians while driving and has already been applied to about 10% of vehicles worldwide. The recent development in autonomous driving has revealed new technical requirements of existing LEDS related to their power and size, obstacles that are being overtaken by Seoul Semi Conductor's highly innovative technology. The South Korean company's sales growth has progressed by +12.8% in 2021 despite the global shortage of semiconductors worldwide.

Wind : -4.07%

After a spectacular year in 2020 that witnessed the number of wind power installations double, the wind energy sub-index realized a loss of -18% in 2021. The biggest pure-play companies in the sector, **Siemens Gamesa**, **Vestas** as well as **Nordex**, have all seen their share prices decline substantially this year. One of the reasons for this decline would be the modest growth expectations for 2021, as Vestas, for example, announced growth of only +8% compared with its previous year's growth figure of +22%. The price of steel and other materials have also strongly impacted the wind turbine manufacturers. The price of steel in Europe reached its historical peak in July but has since dropped by up to 22%, while remaining +55% higher than its level at the same time last year. If the decline in raw material costs continues, this could work well in favour of producers by increasing their margins. In addition, the various agreements which have been reached in Europe to drastically reduce CO2 emissions should also continue to support the expansion of the industry, particularly in the offshore sector. The best performance of the month was achieved by the company **China Datang Corporation renewable Power Co., Limited** which gained an impressive +19.26%.

