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Weekly Investment Focus

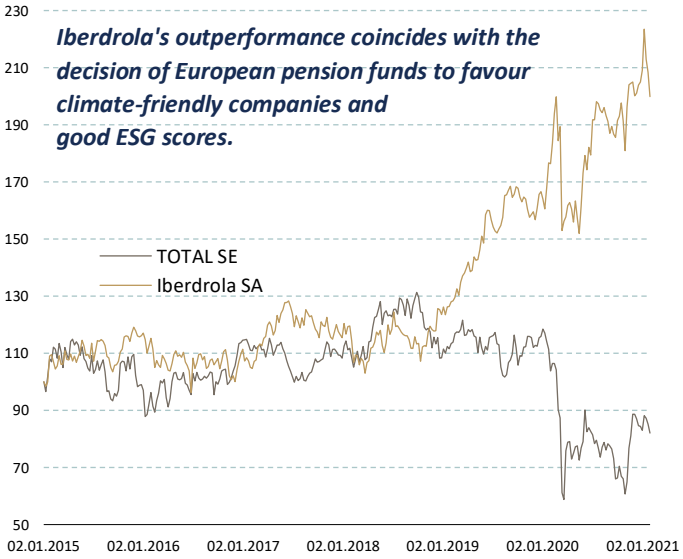
8 February 2021

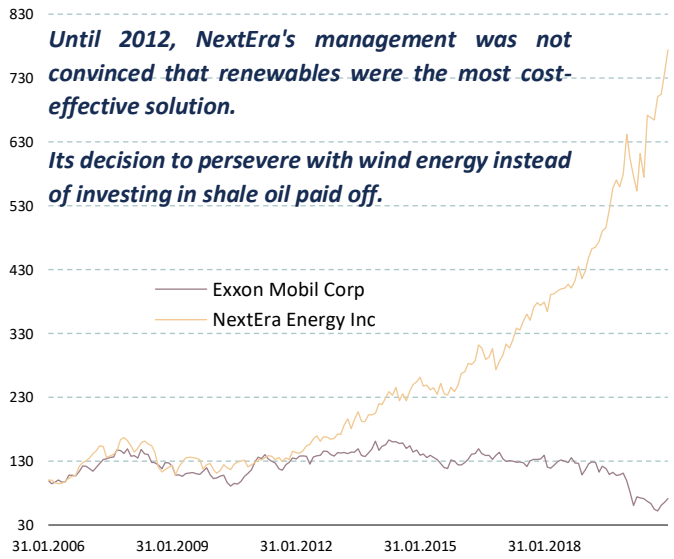
Headlines

- Demand for fossil fuels will continue... but at what cost for shareholders?
- Greening the energy sector could become a growth driver
- CO2 capture & storage and hydrogen production offer synergies with petrochemical activities
- European petrochemical groups position themselves as forerunners of the transition vs. their US peers

Charts of the week

"Fossil fuels... and renewable energies"





Source: Bloomberg, Atlantic Financial Group

Market analysis

"The day after tomorrow... "

The energy sector suffered a sharp correction in 2020 (-37% in the US and -25% in Europe) following the economic slowdown and the mobility decline. The Covid-19 crisis is not the other reason for the sector's devaluation. In fact, since the 2015 Paris agreements, the "fossil" energy sector is suffering from an image problem in the eyes of **investors, who are more inclined to comply with ESG standards**. Moreover, the world leaders (the United States, China and Europe) have committed to boost their economies by massively subsidising renewable energy. Finally, the carbon tax

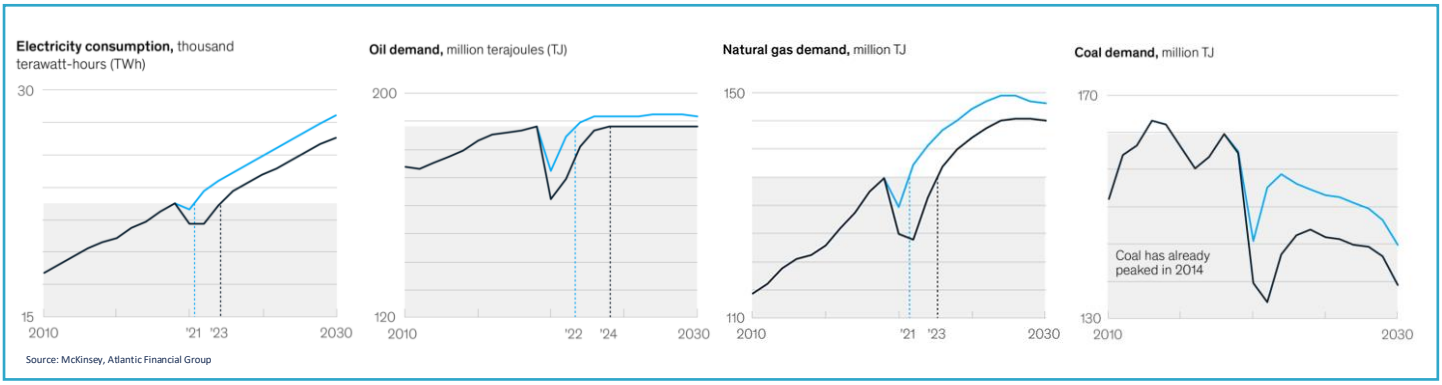
penalises the most polluting sectors, including fossil fuel producers, and activists are threatening to go after these same groups and investors who fund them.

How are the oil majors positioning themselves in the face of the challenges posed not only by climate change and the pressure from activists, but also from shareholders? What assets do they have to be able to successfully complete the transition to renewable energies? What solutions exist to reduce greenhouse gas emissions? Finally, is the sector doomed to suffer from the disruption of renewables or will it be a source of interesting investment opportunities?

Major trend in demand for fossil fuels by 2030

The COVID-19 pandemic has permanently changed energy demand. According to a recent McKinsey study, energy demand will only return to 2019 levels within one to four years (see graph 1). Demand for electricity and gas is expected to rebound faster than for oil, and coal will never return to previous demand levels.

Graph 1 - Energy consumption estimates to 2030



According to McKinsey, **global per capita energy consumption** is **expected to decline by 5% between 2019 and 2050,** but is expected to double in emerging countries, stagnate in China and fall by 20% in developed countries. The Sustainable Development Scenario of the International Energy Agency (IEA) projects that **renewables will account for about 30% of the global energy mix by 2040**.

Rising electricity demand is expected to give a boost to utility producers (Fortum, Drax, EDF) **and electricity retailers** such as Centrica, EON and Endesa. In 2018, electricity consumption increased by 4%, twice the increase in overall energy consumption, and **in the coming years, electricity demand is still expected to grow at a faster rate than overall energy demand.**

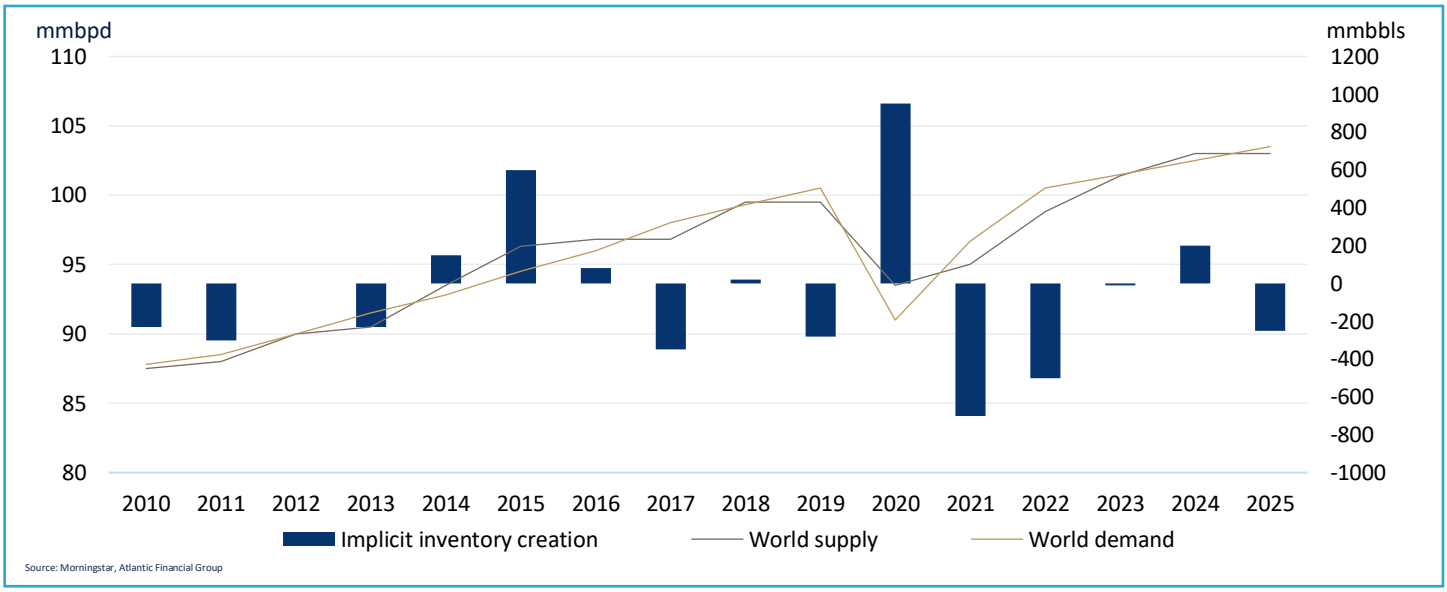
Oil demand will reach a plateau around 2029, followed by a 10% decline in demand until 2050. This is mainly due to slower growth of the car fleet, improved engine efficiency in road transport and increased electrification.

Gas will continue to play a key role for decades (power systems, heat, transport), peaking in the late 2030s. **Gas demand in 2050** is **expected to be 5% higher than today.**

The consumption recovery and the rebound of natural gas prices in Europe could stimulate producers (Gazprom, Shell, Repsol, BP, Equinor), LNG suppliers (Cheniere, Williams Companies, Novatek) and gas trading and marketing utilities (Centrica, Naturgy, Uniper, RWE, Engie, Edison).

However, in the short term, even if oil and gas demand remains weak, oil inventories could decline until 2022 (see graph 2). OPEC+ should continue to exercise discipline at least until demand returns to its 2019 levels, around 2022. In addition, the Biden administration is determined to curb shale oil and gas production, while Iranian oil barrels remain away from the market. US shale oil production will take time to close the gap between supply and demand, and **the price of Brent could return to $70 a barrel by year-end.**

Graph 2 - Daily oil supply & demand and annual inventory changes



A sector in mutation

"The transition into renewables is no longer an option"

Beyond solar or wind renewable energy generation, the big oil groups have the opportunity to invest in infrastructures that offer synergies with their current activities: CO2 capture and storage or hydrogen.

Dioxide Capture and Storage (CCS)

Carbon capture, use and storage (CCUS) involves recovering carbon dioxide from its source of production and storing it underground to prevent its release into the atmosphere. CCUS is applied to a number of industries with high emissions, in addition to oil and gas production, such as power generation, concrete, steel and fertiliser production. It can also be used to manufacture valuable products such as carbon fibre (used in wind turbine blades) and other low- and zero-carbon fuels.

Geological capture and storage is a necessity to achieve carbon neutrality by 2050 and this is where most major oil companies have decided to deploy their cash. **In fact, it is one of the most direct solutions to offset carbon generation emitted during fossil fuel exploration and production.**

Norway, for example, with the help of three oil majors, Statoil, Total and Shell, has launched a CO2 capture and storage project as early as 2017 and aims to turn it into a thriving industry. The project aims to store some 400 million tonnes of CO2 by 2050, the equivalent of France's carbon emissions. The method involves collecting carbon dioxide from a cement factory, a waste incinerator and a fertiliser manufacturing plant in eastern Norway and transport it by ship to

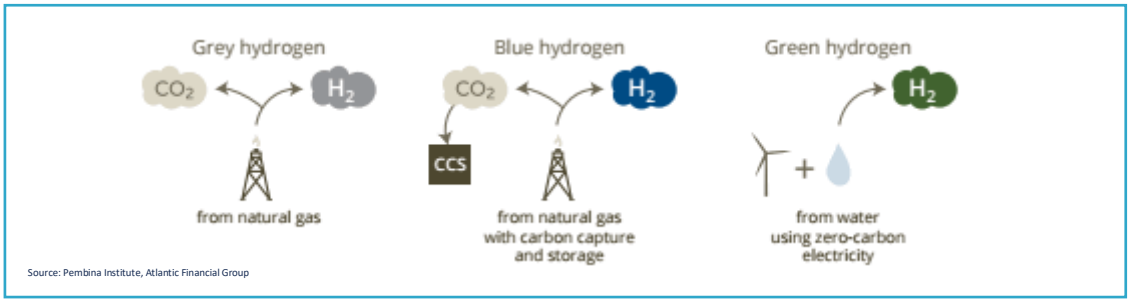
the west coast for the gas to flow through a pipeline to the Troll offshore gas field in the Norwegian North Sea. **CO2 capture and storage could contribute up to 30% to reducing global emissions from energy combustion by 2050.** Total is committed to master this technology.

How can the industrial process be made more efficient in terms of CO2 emissions?

Carbon emissions from refineries account for about one-fifth of US industrial emissions. By using renewable energy to power hydrogen production, refinery emissions can be significantly reduced. More broadly, the adoption of green hydrogen in refineries opens the door for oil companies to start commercialising hydrogen in other sectors of the economy, such as transport.

Green hydrogen is an emerging technology that is just beginning to be deployed on an industrial scale. Therefore, it is still more expensive to produce than grey or blue hydrogen (see Figure 3).

Figure 3 - The three main types of hydrogen



Earlier this year, Total and Engie signed a cooperation agreement to design, develop, build and operate the Masshylia project, France's largest renewable hydrogen production site. Located at the heart of Total's La Mède biorefinery and powered by solar parks with a total capacity of more than 100 MW, the 40 MW electrolyser will produce 5 tonnes of green hydrogen per day to meet the needs of the biofuel production process and avoid 15,000 tonnes of CO2 emissions per year. Shell has also embarked on a pilot project at a refinery in Germany.

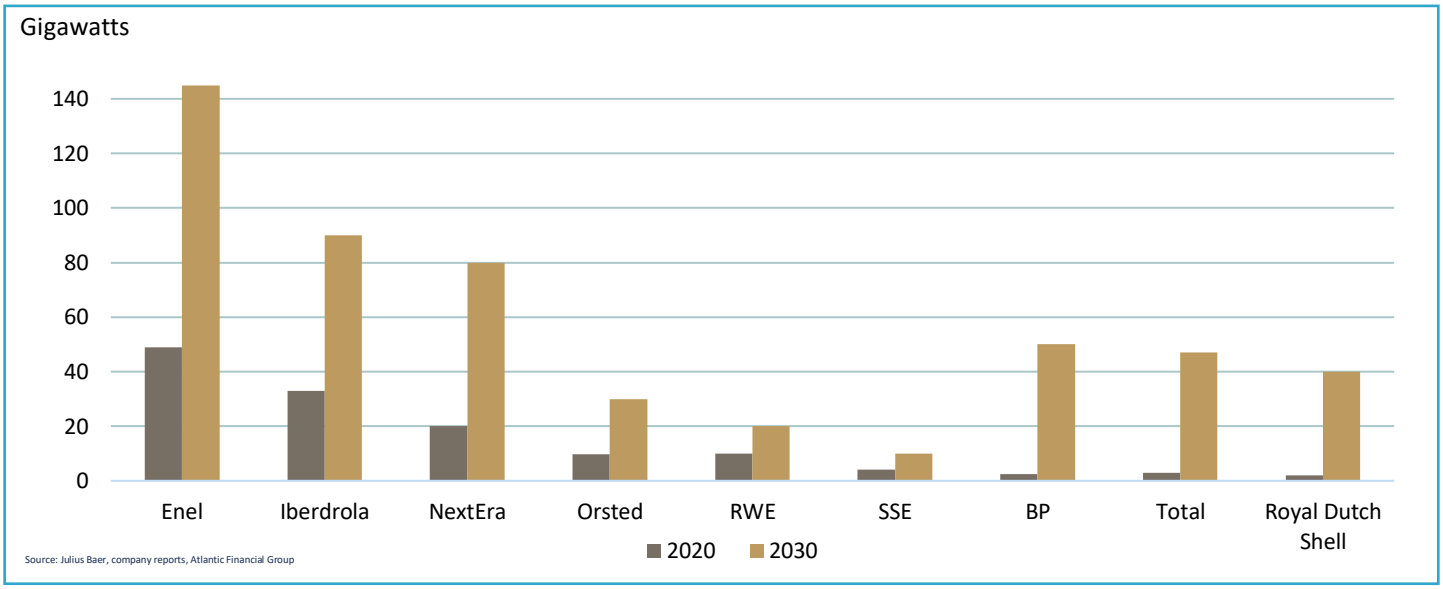
Can conversion to renewable energies be profitable?

European oil companies devote a larger share of their investments to energy transition activities than US majors and could become leaders in this field alongside other large European utilities such as Iberdrola and Enel.

The profitability of renewable projects has only increased in recent years thanks to technological advances, fiscal supports and economies of scale. Renewable energy production projects generate returns of 8-10%, lower than the 15% historically recorded by hydrocarbon projects, but they now offer better visibility than fossil fuel investments. Moreover, additional costs could reduce the return on investment (ROI) of hydrocarbon projects, such as carbon taxes or legal actions by climate activists. Finally, the cost of capital is 3-5% for renewables and 10-20% for fossil fuels. This lower cost of capital will particularly help European oil majors, which plan to invest more than $170 billion by 2030, increasing their share of the global renewables market from 1% to 10%.

It will take time for Oil majors to convert their fossil fuel assets into "green" capital. **By 2021, Europe's major oil companies plan to allocate 10% of their investments into renewable or energy transition assets.** This share of investment could rise to 30% by 2030 and make European oil companies leaders in renewable energy production (see Graph 4).

Graph 4 - Oil companies are set to become major players in renewable energies



The financial situation of European oil integrated companies

European oil majors benefit from strong balance sheets, reasonable debt ratios between 1.5x and 2x net debt/EBITDA and high interest expense coverage between 10x and 15x EBITDA/interest. The companies have managed the pandemic well despite large losses in 2020. Reduced investments, especially in exploration and production, should allow them to generate good liquidity again.

However, **the transition into renewables requires long-term efforts, restructuring including drastic cost reductions, the sale of polluting assets and workforce reductions.** Goldman Sachs estimates that investments to decarbonise the energy sector - renewables, CO2 capture and storage, hydrogen, modernisation of electricity infrastructures - could amount to $16 trillion over the next ten years.

BP, for example, has already announced the sale of some assets and is restructuring its business for a cleaner future. The company has reduced capital spending by billions of dollars, cut costs, obtained new lines of credit, issued bonds and halted exploration activities. BP wants to sell $25 billion in assets by 2025 to reduce debt and pay for its push into green energy. Shell, Total and Equinor have also committed to this.

Conclusion:

The transition into renewables offers the energy sector the opportunity to green its business and the chance to improve its ESG scores, which are essential to draw investors' interest and continue to find attractive financing. Europe's leading petrochemical companies have an advantage over their US rivals thanks to their earlier involvement. They will have more options to divest their polluting assets and reinvest the proceeds in profitable renewable projects. There is little room for error, but their finances are sound. Current valuations do not include the efforts already made to reduce their carbon footprint, let alone the good ability to generate cash and redistribute it to shareholders.

Return on financial assets

Total return by asset class

Markets Performances (local currencies)	Last Price	Momentum Indicator (RSI)	1-Week (%)	1-Month (%)	2021 Year-to-Date (%)	2020 (%)	2019 (%)
Equities							
World (MSCI)	670.6	62.45	4.3%	3.7%	3.9%	16.9%	27.3%
USA (S&P 500)	3 887	62.15	4.7%	4.4%	3.6%	18.4%	31.5%
USA (Dow Jones)	31 148	58.87	3.9%	2.6%	1.9%	9.7%	25.3%
USA (Nasdaq)	13 856	67.60	6.0%	8.1%	7.6%	45.1%	36.7%
Euro Area (DJ EuroStoxx)	409.9	60.31	4.7%	3.0%	3.3%	0.8%	27.3%
UK (FTSE 100)	6 489	42.01	1.3%	-1.8%	0.5%	-11.4%	17.2%
Switzerland (SMI)	10 755	49.18	1.6%	0.6%	0.5%	4.3%	30.2%
Japan (Nikkei)	29 389	60.21	4.0%	6.0%	4.9%	18.2%	20.7%
Emerging (MSCI)	1 395	61.89	5.0%	5.7%	8.1%	18.7%	18.8%
Brasil (IBOVESPA)	120 240	55.25	4.5%	0.7%	1.0%	2.9%	31.6%
Russia (MOEX)	3 435	55.51	3.5%	1.1%	3.3%	14.8%	38.4%
India (SENSEX)	51 355	65.21	9.6%	4.8%	6.3%	17.2%	15.7%
China (CSI)	5 565	55.82	2.5%	2.1%	5.2%	29.9%	39.2%
Energy (MSCI World)	153.9	54.54	4.8%	2.6%	6.6%	-27.7%	13.9%
Com. Serv. (MSCI World)	108.89	70.59	7.0%	8.4%	8.2%	24.2%	25.1%
Materials (MSCI World)	334.4	51.13	2.9%	-0.8%	1.7%	21.6%	20.8%
Info. Tech. (MSCI World)	477.1	62.64	4.9%	5.2%	5.0%	46.2%	47.5%
Utilities (MSCI World)	152.5	52.88	1.8%	1.4%	0.7%	4.8%	22.3%
Financials (MSCI World)	128.2	60.23	5.5%	4.1%	3.7%	-3.1%	24.1%
Cons. Staples (MSCI World)	261.3	47.13	1.6%	-2.3%	-2.4%	8.8%	22.4%
Health Care (MSCI World)	325.1	53.17	1.1%	2.0%	2.2%	15.4%	23.3%
Cons. Discret. (MSCI World)	406.2	66.46	6.2%	6.7%	7.1%	37.0%	28.2%
Industrials (MSCI World)	293.7	55.94	4.1%	1.8%	1.5%	11.8%	27.2%
Bonds (FTSE)							
USA (7-10 Yr)	1.19%	33.54	-0.6%	-1.6%	-1.9%	9.3%	7.4%
Euro Area (7-10 Yr)	-0.20%	41.86	-0.2%	-0.6%	-0.6%	4.5%	6.7%
Germany (7-10 Yr)	-0.42%	33.06	-0.6%	-1.2%	-1.1%	3.0%	3.0%
UK (7-10 Yr)	0.53%	26.30	-1.3%	-2.1%	-2.2%	5.4%	4.8%
Switzerland (7-10 Yr)	-0.34%	29.96	-0.4%	-1.1%	-0.8%	0.4%	2.0%
Japan (5-10 Yr)	0.07%	35.06	-0.1%	-0.3%	-0.2%	-0.1%	0.0%
Emerging (5-10 Yr)	3.98%	55.52	0.2%	-0.1%	-1.1%	5.2%	13.3%
USA (IG Corp.)	1.90%	36.91	-0.5%	-0.2%	-1.8%	9.9%	14.5%
Euro Area (IG Corp.)	0.26%	46.23	0.0%	-0.3%	-0.1%	2.8%	6.2%
Emerging (IG Corp.)	3.55%	66.70	0.1%	0.5%	0.0%	8.1%	13.1%
USA (HY Corp.)	4.03%	77.27	0.6%	0.8%	1.0%	7.1%	14.3%
Euro Area (HY Corp.)	3.14%	75.06	0.6%	0.6%	1.2%	2.3%	11.3%
Emerging (HY Corp.)	5.82%	72.61	0.9%	0.5%	0.1%	4.3%	11.5%
World (Convertibles)	459.0	69.85	4.7%	6.2%	7.2%	38.8%	17.3%
USA (Convertibles)	627.2	69.53	6.3%	8.1%	9.0%	54.5%	22.8%
Euro Area (Convertibles)	4 107	55.47	1.6%	-1.0%	-0.2%	6.1%	7.6%
Switzerland (Convertibles)	186.5	34.78	-0.2%	-0.2%	-0.1%	0.5%	2.4%
Japan (Convertibles)	199.8	73.27	2.2%	2.5%	2.8%	2.8%	2.6%
Hedge Funds (Crédit Suisse)							
Hedge Funds Indus.	671.4	70.06	n.a.	3.8%	n.a.	2.5%	9.3%
Distressed	859.5	63.83	n.a.	2.3%	n.a.	1.5%	1.4%
Event Driven	719.4	67.25	n.a.	3.8%	n.a.	3.1%	8.2%
Fixed Income	374.0	70.19	n.a.	1.4%	n.a.	2.2%	6.1%
Global Macro	1 099.5	69.42	n.a.	4.5%	n.a.	2.0%	10.4%
Long/Short	856.1	67.29	n.a.	4.1%	n.a.	3.6%	12.2%
CTA's	315.8	55.92	n.a.	5.3%	n.a.	-3.2%	9.0%
Market Neutral	273.3	45.22	n.a.	1.8%	n.a.	-0.1%	1.6%
Multi-Strategy	651.5	71.46	n.a.	4.2%	n.a.	1.4%	7.3%
Volatility							
VIX	20.87	43.74	-36.9%	-17.6%	-8.3%	65.1%	-45.8%
VSTOXX	20.64	44.26	-28.8%	-18.1%	-11.7%	67.5%	-41.5%
Commodities							
Commodities (CRB)	461.4	69.77	0.6%	2.9%	4.0%	10.5%	-1.9%
Gold (Troy Ounce)	1 815	40.32	-2.5%	-1.8%	-4.4%	24.9%	18.3%
Oil (WTI, Barrel)	56.85	76.62	6.2%	13.9%	17.2%	-20.5%	34.5%
Oil (Brent, Barrel)	59.92	74.89	8.2%	12.4%	16.0%	-23.0%	24.9%
Currencies (vs USD)							
USD (Dollar Index)	91.046	55.77	0.1%	1.1%	1.2%	-6.7%	0.2%
EUR	1.2044	43.27	-0.1%	-1.4%	-1.4%	9.7%	-2.2%
JPY	105.48	30.47	-0.5%	-1.5%	-2.1%	5.3%	0.9%
GBP	1.3739	59.14	0.6%	1.3%	0.5%	2.8%	3.9%
AUD	0.7678	52.10	0.7%	-1.0%	-0.2%	9.5%	-0.4%
CAD	1.2762	50.68	0.7%	-0.5%	-0.3%	1.8%	5.0%
CHF	0.8996	38.88	-0.3%	-1.6%	-1.6%	9.8%	1.4%
CNY	6.4575	56.30	0.2%	0.3%	1.1%	6.7%	-1.2%
MXN	20.108	49.09	1.4%	-0.5%	-1.0%	-4.9%	3.8%
EM (Emerging Index)	1 718.0	50.46	0.0%	-0.4%	-0.1%	3.3%	3.1%

Source: Bloomberg, Atlantic Financial Group

Performance (Negative \ Positive)

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