

Q2 2021 GLOBAL REGULATIONS

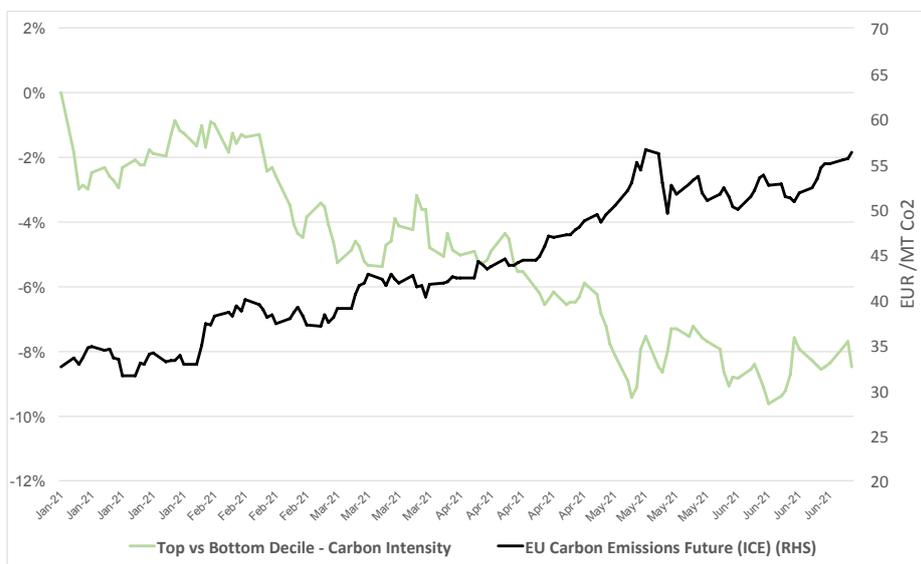
Following the rapid growth in ESG interest and investment witnessed in 2020, the importance of ESG in the investment process has continued to gain growing acceptance amongst both investors and investment professionals in 2021. Despite this trend, H1 2021 has proven to be more challenging for investors focused on environmental (“E pillar”) considerations in their investment process. The significant underperformance of the renewables sector in the U.S. and EU starting in January only tells part of the story, and the investment challenge has been more complex than a single industry or thematic effect (e.g. “tech vs. old economy”, “green vs. brown”).

Our research finds that in H1 2021, less efficient, higher carbon intensity companies significantly outperformed lower carbon intensity companies, not simply at the aggregate level, but importantly *within* some of the most carbon-intensive sectors such as Industrials and Materials¹. We have seen recent underperformance of more carbon efficient companies on a sector neutral basis in key carbon intensive sectors, and in several cases with substantial contribution from adverse stock selection effects, rather than other factors. It is fair to say that for climate-conscious equity investors, it has not been easy “being green” in H1 2021.

2021 H1 TOP VS. BOTTOM DECILE PERFORMANCE BY CARBON INTENSITY: UNIVERSE & GICS SECTORS

UNIVERSE -8.5%
INDUSTRIALS -11.6%
MATERIALS -10%
UTILITIES -16.5%
ENERGY -9.6%

2021 H1 EU ETS CARBON EMISSIONS FUTURES PERFORMANCE:
+75%



¹ ECO methodology: we examined the historical performance of equally weighted top/bottom decile long/short portfolios ranked by carbon intensity (CO2 metric tonnes Scope 1+2 per \$1mm revenue) from a global investable universe of ca. 5000 listed equities, and performed attribution analysis on the long/short positions. For avoidance of doubt, “top” decile consists of the most efficient, lowest carbon intensity companies, while “bottom” decile represents companies with the highest levels of carbon intensity. We also conducted this exercise creating long/short deciles *within* GICS Level 1 sectors, and found significant relative underperformance (local currency returns) of low carbon intensity names within Industrials (-11.6%), Materials (-10%), Utilities (-16.5%) and Energy (-9.6%) in H1 2021. Source: ECO Advisors, Bloomberg

This result is in stark contrast with the evolution of the EU ETS carbon futures price during 2021, which has risen steadily from ca. 32 EUR/tonne to ca. 56 EUR/tonne during H1 2021, a remarkable 75% increase. Furthermore, we find overall evidence of outperformance of lower carbon intensity companies on an aggregate basis over the last decade, until the end of 2020. It is therefore appropriate to ask if there are temporary or cyclical factors that may be favouring companies that appear inferior on important “E metrics” such as carbon intensity, or if there are any structural reasons to be wary of climate efficiency as a guide to superior performance in the future. Despite the trend amongst asset owners to divest from the “dirtiest” assets and increasing demand for climate-aware and/or Paris-aligned equity investment, recent research

suggests the market is still far from “fully priced” for the potential consequences of higher costs for GHG emissions², and our analysis of carbon intensity in H1 2021 supports this view.

In 2021, we have begun to witness the international convergence of important regulatory trends, which will have significant implications for investors going forward, both in terms of risks and opportunities. The EU has been the clear leader in environmental regulations and initiatives for some time and has been at the forefront of defining sustainable investment and the requirements of green investing. It is evident that the U.S. and China are now joining suit. **We expect the convergence of regulatory trends we are witnessing to have a long term transformative**

effect on company behaviour, market pricing, and investment decision making in the months and years ahead. In this newsletter, we examine the structural backdrop which supports this view.

Europe and the EU

The EU is pushing forward with several important initiatives around climate disclosure, both by companies and investment managers. For investors, the Sustainable Finance Disclosure Regulation (SFDR) and Green Taxonomy are mandatory disclosures which work in conjunction with one another and have already partially come into effect in March 2021. These initiatives are part of the EU's Action Plan on Sustainable Finance, which pursues two goals: to integrate sustainability considerations into the financial system, and to steer the flow of capital towards sustainable investments³. The SFDR introduces mandatory ESG disclosures for asset managers and other financial market participants on sustainability risks and 'Principal Adverse Impacts', which are the negative effects on sustainability factors that an investment decision or advice might have⁴. The green taxonomy aims to create a common framework and language as to whether an activity can be considered to be environmentally sustainable⁵. Disclosures on taxonomy alignment must be made for each financial product⁶.

In the UK, we see disclosure focused around the TCFD. The Task Force on Climate-Related Financial Disclosures (TCFD) was created in 2015 by the Financial Stability Board to develop consistent climate-related financial risk disclosures for use by companies, banks, and investors in providing information to stakeholders⁷. The UK government is in the process of making TCFD aligned climate-related financial disclosures mandatory for publicly quoted

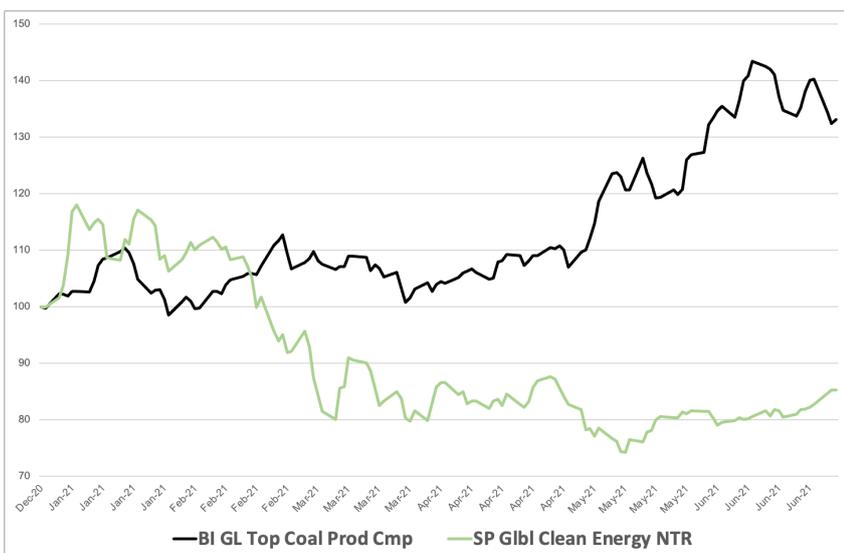
companies, large private companies and Limited Liability Partnerships⁸. Full disclosures are expected in 2022.

In terms of carbon pricing, the theme of levelling out the playing field continues. The EU Emissions Trading System (ETS) currently covers about 40% of all EU emissions and is the world's largest ETS⁹. It works on the cap-and-trade principle, by setting a cap on companies' carbon emissions and allowing companies to sell excess reductions for profit to other companies that have failed to remain below their specified limits. By gradually reducing the number of carbon permits available each year, they create a cycle of rising prices and a greater pressure on companies to reduce their emissions and adopt clean energy technology.

ETS' are designed to internalise carbon emissions externalities, meaning that companies that have historically polluted heavily for free will no longer be able to do so and will have to internalise the cost, either by reducing emissions or by purchasing polluting rights through the scheme. EU carbon prices have been steadily rising since 2018 and hit a new high in Q2 2021¹⁰. The EU ETS legislation provides for the possibility to link the EU ETS with other compatible emissions trading systems in the world at national or regional level¹¹. In line with its commitment to achieve net-zero by 2050, the UK launched its own ETS in May, with carbon prices reaching over £50 per tonne, making the cost of emitting in the UK higher than in the EU¹². The ETS is set to cover 155mt of CO₂e in its first year¹³.

The EU is also proposing a carbon tariff, to make sure that companies based in the EU are not disadvantaged. The tariff, known as the carbon border adjustment mechanism (CBAM), is designed to put EU firms on an equal footing with competitors in countries with weaker carbon policies¹⁴.

The proposal will take the form of a regulation setting up a carbon border adjustment mechanism authority, with the measure being phased in from 2023 and a full implementation from 2026. The tax will initially target a limited number of imports including iron, steel, cement and fertilisers, and will be based on the equivalent carbon price paid in Europe. Importers will have to buy special certificates at a price linked to the EU ETS. If countries have similar carbon pricing to Europe, the tariff will not apply, contributing to the thesis that polluting or being poorly prepared for carbon regulations will be costly going forward¹⁵. In the UK, the current government is coming under pressure to introduce its own carbon border tax to protect British industry from cheap competition from polluting countries.



The chart above provides another lens to examine the challenge faced by "Green" investors in H1 2021. The chart shows the USD performance of an index of top coal producing stocks (BICOATGC Index) and the performance of the S&P Global Clean Energy Index (BICOATGC Index). Source: ECO Advisors, Bloomberg

Rishi Sunak, chancellor, has ordered work to be done on the tax¹⁶.

China

Upcoming regulations in China are keeping in line with global trends, and appear to be closely aligned with the EU's initiatives. After its rapid and heavily polluting industrialisation, China's environmental challenges are now understood to be a significant risk to China's society and economy. In a bid to tackle these challenges, China's government has declared a "war on pollution" and introduced a number of green initiatives¹⁷. China's president Xi Jinping told the UN General Assembly in September that China aims to hit peak CO₂ emissions before 2030 and achieve carbon neutrality before 2060¹⁸.

Christine Loh, chief development strategist at the Institute for the Environment at Hong Kong University of Science and Technology, believes the decarbonisation target "confirms China's paradigm shift from polluted 'factory of the world' to clean, green producer of homegrown high-tech goods, and the world's biggest market for electric vehicles."¹⁹

In the EU-China Joint Statement on Climate Change adopted at the EU-China summit in 2015, the two entities agreed to further enhance their bilateral cooperation on carbon markets. Against this background, a project termed the "Platform for Policy Dialogue and Cooperation between EU and China on Emissions Trading" was envisioned²⁰. The project aimed to provide capacity building and training to support Chinese authorities in their efforts to implement a Chinese ETS. The ETS is now being implemented and is expected to start trading later this year²¹. The ETS regulates more than 2,200 companies from the power sector and is estimated to cover approximately 40% of national carbon emissions, with the scope to be further expanded in the future^{22 23 24}.

In June 2021, China announced its own mandatory carbon emission disclosures after first testing it with some commercial banks and listed companies. Central bank Governor Yi Gang confirmed the trends towards regulatory convergence that we are observing, stating "our goal is to make a uniformed disclosure standard, and in the future, we will go in the direction of mandatory disclosure of climate-related information," during a panel discussion at the Green Swan conference²⁵. These national and international initiatives mean that disclosures and transparency are going to have to ramp up.

Earlier this year, China's central bank also announced that it is working with the EU to adopt a common green taxonomy, aiming to implement a jointly recognised classification system. PBC Governor Yi Gang said strengthening the nation's green finance system was the central bank's priority

for the next five years and that improving the taxonomy of green finance²⁶. Yi said deepening international co-operation on green finance, including discussing details on the adoption and incorporation of a globally recognised green taxonomy would be discussed at the upcoming G20 summit, which is scheduled to be held in Rome in October. During the summit, the PBoC plans to set up a sustainable finance study group, with the US Treasury Department as a co-chair, to establish coordination on building a roadmap for advancing sustainable finance. "We will deepen the cooperation with Italy, US and other G20 members, to discuss and design an overall road map of sustainable finance, to further discussions with various parties about topics such as reporting and disclosure, as well as green taxonomy," Yi said²⁷.

U.S.

While the Trump administration rolled back environmental protections and withdrew the U.S. from the Paris Agreement, the current Biden administration has been quick to make its commitments to decarbonisation and international cooperation clear. President Biden quickly re-entered the U.S. into the Paris Agreement and stated that the main climate target of his administration is to achieve net zero greenhouse gas emissions by 2050, and to reduce GHG emissions by 50%-52% by the year 2030 relative to 2005 levels. An important part of his climate plan involves investing in infrastructure and innovation, stating that "America must lead the critical industries that produce and deploy the clean technologies"²⁸.

President Biden is also calling on Congress to invest \$35bn in the full range of solutions needed to achieve technology breakthroughs that address the climate crisis and position America as the global leader in clean energy technology and clean energy jobs. His climate plan includes investing \$15bn in demonstration projects for climate R&D priorities, including utility-scale energy storage, carbon capture and storage, hydrogen, advanced nuclear, and floating offshore wind, amongst other technologies and materials that might be used in electric vehicle production²⁹.

As mentioned, the upcoming G20 summit in October may see further coordination globally and the strengthening of the trend towards regulatory convergence. Earlier this year John Kerry, President Biden's climate envoy, said the U.S. would probably "join with Europe" to begin requiring companies to disclose information on climate risk³⁰. Allison Herren Lee, the acting head of the Securities and Exchange Commission, also said the U.S. securities regulator was focusing on climate-related disclosures and planned to update its guidance on the issue for the first time since 2010³¹.

In May the Biden administration took the first concrete step toward enforcing climate disclosure by requiring a broad range of U.S. banks and companies to disclose the risks they face from climate change. A new executive order also instructed Treasury secretary Janet Yellen to work with the other members of the Financial Stability Oversight Council to report how they plan to reduce climate-related risks to financial stability³². At a press

conference announcing the order, Brian Deese, director of the National Economic Council, stressed the importance of harmonising U.S. standards with those of other countries³³. This could mean mandatory TCFD reporting, as will soon be required in the UK. Finally, John Kerry, recently confirmed that President Biden was “interested in evaluating the border adjustment mechanism” that is being pursued by the EU³⁴.

Implications for Investors

Until recently, focusing on carbon efficiency or implementing a Paris-aligned transition path may have been a “nice to have” for many companies; perhaps good marketing, but not necessarily impactful from an investor’s standpoint. However, going forward, there is every indication that “E leadership”, in its various forms, will be a source of competitive advantage globally. Current ESG reporting and disclosure standards lag market demand; incoming policies requiring more consistent and comprehensive disclosures will help with transparency, influence market prices, and assist investors in making more informed decisions. In addition, carbon pricing initiatives developing globally mean that CO₂ externalities will be increasingly affecting corporate bottom lines. With increasingly stringent and

converging carbon emissions regulations, as well as mandatory disclosures, we believe the equity market is likely to start to price CO₂ emissions and adverse impacts to the environment more aggressively going forward.

In summary, it appears to us that the structural backdrop to support the “E pillar” as an important differentiator and driver of security alpha remains firmly intact and considerations like carbon intensity are likely to increase in importance. We feel the recent relative outperformance of companies benefiting from negative CO₂ externalities is unlikely to persist. While factor timing is notoriously difficult, as we move through the cycle, we expect criteria such as carbon intensity and E pillar leadership to again start to reward investors.

REFERENCE FOOTNOTES

²FT: “Equity Investors warned of 20% shock from Carbon Tax”, <https://www.ft.com/content/45752266-a711-42f4-bd44-44555024c33f?segmentId=3f81fe28-ba5d-8a93-616e-4859191fabd8>

³ <https://www.spglobal.com/marketintelligence/en/news-insights/blog/what-is-the-impact-of-the-eu-sustainable-finance-disclosure-regulation-sfdr>

⁴ <https://assets.kpmg/content/dam/kpmg/ie/pdf/2021/03/ie-sustainable-finance-disclosure-reg-sfdr.pdf>

⁵ https://ec.europa.eu/commission/presscorner/detail/en/ip_21_1804

⁶ Currently there is guidance on technical screening criteria to define which activities contribute substantially to two of the total six environmental objectives under the Taxonomy Regulation: climate change adaptation and climate change mitigation. The Taxonomy is continuously evolving, but as of right now it covers the economic activities of about 40% of listed companies, in sectors which are responsible for almost 80% of direct greenhouse gas emissions in Europe. It includes sectors such as energy, forestry, manufacturing, transport and buildings.

⁷ <https://www.fsb-tcfid.org/about/>

⁸ <https://www.gov.uk/government/consultations/mandatory-climate-related-financial-disclosures-by-publicly-quoted-companies-large-private-companies-and-llps>

⁹ https://ec.europa.eu/clima/policies/ets_en

¹⁰ <https://www.edie.net/news/11/UK-ETS--Post-Brexit-carbon-market-opens-for-first-time-with-carbon-price-topping--50-per-tonne/?adfesuccess=1>

¹¹ https://ec.europa.eu/clima/policies/ets/markets_en

¹² <https://www.reuters.com/business/sustainable-business/britains-carbon-market-begins-trading-higher-than-eu-prices-2021-05-19/>

¹³ <https://www.edie.net/news/11/UK-ETS--Post-Brexit-carbon-market-opens-for-first-time-with-carbon-price-topping--50-per-tonne/?adfesuccess=1>

¹⁴ <https://www.bloomberg.com/news/articles/2021-06-02/eu-climate-levy-to-be-linked-to-prices-in-red-hot-carbon-market>

¹⁵ <https://www.euractiv.com/section/energy-environment/news/eus-carbon-border-tariff-to-target-steel-cement-power/>

¹⁶ <https://www.ft.com/content/514058ab-fd27-4318-82e0-dd5501356ebc>

¹⁷ <https://www.nytimes.com/2018/03/12/upshot/china-pollution-environment-longer-lives.html>

¹⁸ <https://www.bbc.com/news/science-environment-54256826>

¹⁹ <https://ienv.ust.hk/news/can-china-meet-its-ambitious-decarbonization-goals>

²⁰ <https://www.eu-chinaets.org/>

²¹ <https://www.iea.org/reports/chinas-emissions-trading-scheme>

²² https://icapcarbonaction.com/en/?option=com_etsmap&task=export&format=pdf&layout=list&systems%5B%5D=55

²³ Key pillars of the development of the national ETS include: reporting and verification of historical emissions data from eight emission-intensive sectors; development of the national registry, trading system, and national enterprise GHG reporting system; set-up of the legislative and regulatory framework; and capacity building.

²⁴ China is also moving to improve green investment standards. The foundation for sustainable investments in China was laid in 2016 with the “Guidelines for Establishing the Green Financial System” which aimed to mobilise and incentivise more capital to invest in green sectors through a series of policy incentives. In 2019, the Asset Management Association of China (AMAC), a self-regulating body, asked its members to carry out a self-assessment on their green investing practices. According to AMAC’s report, which was released in February 2021, only 40% of 37 sampled retail fund companies reported that green investing had been incorporated into their strategic planning. Further, just one-third of the sampled group had set up green investing targets, and only 38.5% disclosed whether they had fulfilled their internal goals. The SFDR will have implications for Chinese financial entities as those that market products in the EU will fall under the umbrella of the regulation and will need to be compliant. Sources: <https://www.greenfinanceplatform.org/policies-and-regulations/chinas-guidelines-establishing-green-financial-system>; <https://www.globalelr.com/2021/04/china-and-eu-to-collaborate-on-green-investment-standards/>

²⁵ <https://www.bloomberg.com/news/articles/2021-06-04/china-to-make-climate-information-disclosure-mandatory-yi-says>

- ²⁶ <https://www.globalelr.com/2021/04/china-and-eu-to-collaborate-on-green-investment-standards/>
- ²⁷ <https://www.ft.com/content/cddd464f-9a37-41a0-8f35-62d98fa0cca0?desktop=true&segmentId=d8d3e364-5197-20eb-17cf-2437841d178a#myft.notification:instant-email:content>
- ²⁸ <https://www.whitehouse.gov/briefing-room/statements-releases/2021/04/22/fact-sheet-president-biden-sets-2030-greenhouse-gas-pollution-reduction-target-aimed-at-creating-good-paying-union-jobs-and-securing-u-s-leadership-on-clean-energy-technologies/>
- ²⁹ <https://www.whitehouse.gov/briefing-room/statements-releases/2021/03/31/fact-sheet-the-american-jobs-plan/>
- ³⁰ <https://www.ft.com/content/77a8292d-2e7f-43a1-9062-2e639c1e6b2a>
- ³¹ <https://www.sec.gov/news/speech/lee-climate-change>
- ³² <https://www.ft.com/content/8d6d8866-46f0-4fa0-ad21-be6f106d0bd7>
- ³³ <https://www.ft.com/content/9e01478c-acf3-45f4-b17f-95748fd27141>
- ³⁴ <https://www.bloomberg.com/news/articles/2021-04-23/biden-exploring-border-adjustment-tax-to-fight-climate-change>