ACADEMY SECURITIES
MISSION DRIVEN

Academy ESG

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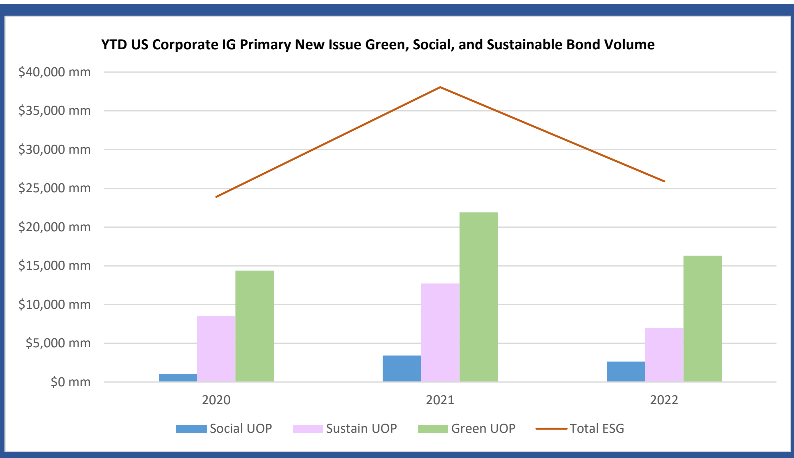
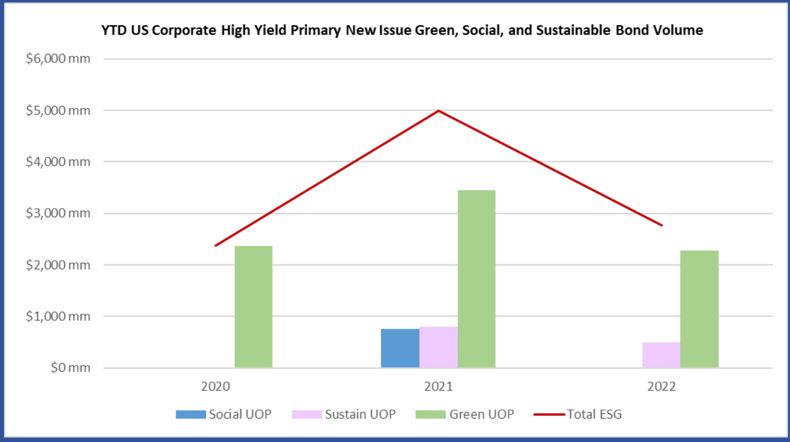
In this month's report, we review the Inflation Reduction Act and its possible impacts beyond just what the headlines are saying.

The bill includes approximately [$270bn in tax related incentives and +$100bn in energy/climate related spending] on concerns like air pollution, hazardous materials, transport & infrastructure, as well as DOE grants and loans. However, when compared to US corporate GSS issuance (which is approx. ~$200bn since 2016), it remains to be determined how effective the spending will be, which is why we take a deeper dive through the bill and identify areas of the most interest, opportunity, impact, and where there could be headwinds.

As general background, the bill was not bipartisan and was passed through the reconciliation process. It has some clear winners and setbacks (for some). In summary, the first portion of the legislation codifies an increase to the corporate tax rate, an increased budget for the IRS, a share repurchase tax, and the start of a drug pricing scheme for certain drugs set to go into effect over the coming years. However, Title I - Subtitle D (and onward) is what we are focused on for this report and its implications on GSS financing, disclosure, and opportunity.



Investment Grade: Since our last ESG report there has been an uptick in GSS themed issuance. Pepsi came to market with its 2nd Green Bond–a $1.25bn 10YR. Meanwhile Alliant, printed its 5th Green Bond, marking the 2nd time they've used the structure for Wisconsin Power & Electric. Two other utilities printed sustainability bonds, NRUC & SO, as did WFC (Academy Served as Joint-Bookrunner). We also saw both Intel and GM issue inaugural green bonds–totaling over $3bn.



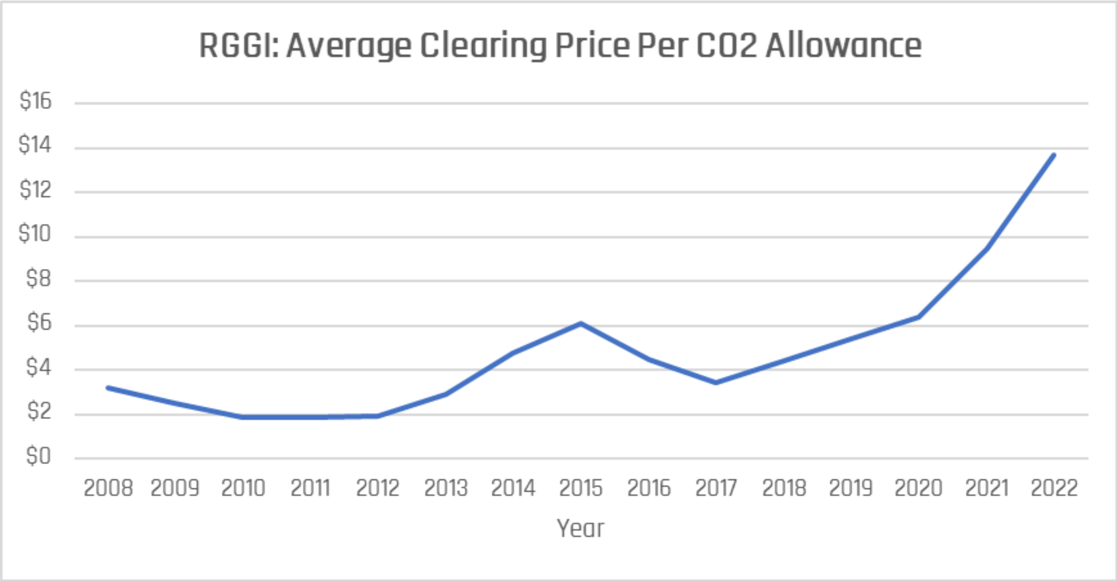
High Yield: This month Ford came to market for its 2nd Green Bond. It printed $1.75bn on a 10YR (Academy served as Co-Manager).

Where is this leading us?

One area that stood out immediately was the possible opportunities across the industrial sector for companies to come to market and fund their decarbonization and climate resiliency efforts. Parts of the bill, like Sec. 50161, provides over $5bn in funding for advanced technology for energy intensive companies like steel, cement, glass, and certain chemical manufactures to accelerate their greenhouse gas reduction plans. This is important as industrials over the course of the past 3 decades, when compared to electric utilities, have [lagged in their ability to decarbonize]. This section of legislation (and sections similar to it) have the ability to help a $3 trillion dollar sector (a chief emitter of GHGs) help make itself sustainable and possibly more attractive to environmentally focused investors.

Another direction this legislation is pushing us towards is enhancing ESG rigor and standardized disclosure. For instance, the EPA has been granted funds to work on enhanced corporate climate reporting standards and has been directed to develop low-embodied carbon labeling for materials acquired by the US Government and the Federal Highway Administration. Building codes, as it relates to emissions, will also become aligned to international standards – in this case, the International Energy Conservation Code's *Zero Energy Provision*.

The combination of carbon tracking within products and enhanced disclosure could possibly lead to even further increases in the cost of emissions trading allowances and credits. Here in the United States, there are only a couple of emissions trading schemes. In Europe however, there is more of a market. Regardless, costs in both markets have recently surged. In Europe, the cost has increased 81% YoY. Here in the United States, it also increased. According to RGGI, from June 2021-June 2022, the clearing price per CO_2 allowance ballooned 74% from $7.97 to $13.90.



As investors, business leaders, and regulators become more focused on this you'll likely see the cost of these credits/allowances continue to rise,

The other clear direction that this bill is going in is to lead the US down the road of enhanced manufacturing capabilities. The *Domestic Content Bonus* has been added to a number of investment/production tax credits and funding/grant rebate programs. Those who tap these funds that are using US steel and manufactured products as part of the construction process will receive an increased credit. Another key part of this bill is a push for the development of these technologies, jobs, and facilities in low-income areas.

Head Winds

The hydrocarbon/energy industry as well as companies focused on EV infrastructure are likely to see some headwinds.

Financially, the oil and natural gas industry will likely experience some economic headwinds in the form of increased taxes. The legislation updates the Superfund tax for inflation on imported petroleum and increases the cost of leases for E&P on federal lands. In addition to the Superfund and land lease increases, there is also the addition of a Waste Emissions Tax. This part of the legislation could be really impactful as it sets a rate of $1,500 on every metric ton of GHG released over 25,000 tons. For perspective, in 2020 roughly 316mmt of CO_2e was produced from hydrocarbon production, storage, and transmission!

In addition to the already rising price of CO_2 emissions' credits and allowances, the introduction of these fees and taxes might accelerate it!

From a technical execution perspective, the build out of electric vehicle infrastructure might be more expensive than the vehicles themselves. Section 70002 is a good example of this where the USPS is granted $3bn in funding for a clean fleet. When you dive in, you see that a majority of the funding is dedicated to the infrastructure behind the fleet (charging stations). This is important as charging stations, depending on their size, can run from a couple hundred dollars to a couple thousand on the low end and up to $45,000-$50,000 on the high-end for acquisition, installation, and management. No doubt this is good news for EV charger manufacturers and suppliers, so long as supply chain issues can be resolved.

Big Winners

The renewable energy sector (with an atomic twist) is one of the clear winners. Since the onset of the Ukrainian invasion by Russia, you can see the impact it had on renewable energy and climate tech investments. This package is a tax credit and grant fueled injection that could help jump start reinvestment that has decelerated since January, and according to the IPCC is needed to meet decarbonization commitments. There is also an extension of the nuclear power production credit until 2033 (to some extent this mirrors Europe's inclusion of nuclear in its green instrument taxonomy.) It also includes the sustainable construction industry which is likely to see some upside from the Energy Efficient Commercial Buildings Deduction.

The other big winners are US & North American critical mineral extractors/recyclers vis-à-vis the Clean Vehicle Credit. For instance, to receive the max clean vehicle credit of 80%, by 2026 critical minerals used in the manufacturing of the vehicle must come from the US, are recycled in North America, or are from a country with free trade agreements. The same applies to the battery components. These minerals will also be used in a lot of the sensor technology, not to mention the battery management systems, production, etc. As the US government looks to avoid relying on China and other strategic competitors as suppliers of critical minerals and advanced hardware, we could see a resurgence of domestic mining operations.

Points to Consider

For industrial issuers especially, we highly recommend looking at aligning any GSS framework and UOP with the SEC 50161 Advanced Industrial Facilities Deployment Program. An industrial issuer could raise capital under the framework and then allocate it accordingly to the remainder of the projects or investments not funded via the legislation, while simultaneously using the metrics needed by the government within their annual GSS bond reporting. Other sectors could also mirror this technique and align their frameworks and strategy with the legislation's prerequisites for funding and tax credits.

Bottom Line

1. Massive opportunity for industrials to become greener and for ecologically focused investors to consider funding them.
2. Hydrocarbon extraction, production, storage, and transmission could see a hit to their financials as a result of the Waste Emissions Rules along with the increases to the Superfund tax and land leases.
3. More rigor that could continue to drive the cost of GHG emissions and impact carbon & water commodities.

Further Resources

CRFB: https://www.crfb.org/blogs/whats-inflation-reduction-act

Charging Station Cost: https://www.mdpi.com/2032-6653/12/1/21/pdf

EPA-Oil & Gas Emissions: https://www.epa.gov/system/files/documents/2021-10/subpart_w_2020_sector_profile.pdf

EPA GHG Inventory: https://www.epa.gov/ghgemissions/inventory-us-greenhouse-gas-emissions-and-sinks

RGGI: https://www.rggi.org/investments/proceeds-investments

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