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Perspectives

The Challenge of Data in ESG

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Real Estate Issues®: ESG Series

With the SEC expected to release a final version of its climate disclosure rule in the near future, the impact of this ruling is anticipated to be far-reaching as investors demand greater visibility into the risks that climate change may have on their investment strategies. That reach not only includes publicly traded



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companies but also publicly traded and non-traded REITs which, according to NAREIT, are required to make regular SEC disclosures, including quarterly financial reports and yearly audited financial reports.

Amongst the anticipated disclosures is a requirement for Direct Greenhouse Gas Emissions (GHG), also called Scope 1 emissions, and Indirect GHS, also called Scope 2 emissions. In addition, if a registrant has material indirect emissions within their supply chain, those GHG emissions may also be required to be disclosed.

The emissions required for disclosure require the same care and accountability that companies currently exercise with purely financial performance – the difference is that now we are looking at the energy consumption or energy performance of the investment. While companies have accounting systems and procedures in place to document financial performance, that is not always the case for tracking the consumption of utilities such as energy and water.

To report on anything, the first step is data identification – what is it that we are trying to account for? In this case, it is Scope 1, 2, and potentially 3 emissions.

The primary way we identify the Scope of an emission is by identifying where the emission originates from and who controls the emission. The "emission" refers to the discharge or production of something, in this case, a greenhouse gas. If you think about your car, unless it is an electric vehicle, you put gasoline or diesel fuel in the car for the car to drive. The engine in the vehicle uses that fuel to produce energy resulting in the wheels rotating. The conversion of that fuel to energy also results in the discharge of emissions from the vehicle, carbon monoxide, and nitrogen among other gases. When released, some of those gases can rise into the atmosphere and contribute to the accumulation of greenhouse gases already present.

Car emissions are typically Scope 1 emissions – they are direct, meaning the emission occurs from your property, i.e., your car. If you think about where the "flame is," the smoke that comes from the flame is the emission and if the flame is on your property, it is a direct emission. In Real Estate, we have a few potential sources of "flames" on our properties, the most obvious being any device that is fueled by natural gas. Typically, this is related to cooking or heating and may include furnaces, boilers, fireplaces, and fire pits, as well as appliances in the kitchen such as gas stovetops. To measure the emissions that result from the combustion of the natural gas on your property, we must know how much natural gas was delivered to your property. With this data in hand, you can see that measuring the consumption of natural gas becomes very similar to any other accounting exercise. Other sources of Scope 1 emissions may be fleet vehicles or the escape of refrigerants from cooling equipment, sometimes called fugitive emissions. In each case, we need to measure how much fuel was used or how much refrigerant escaped for the asset over the reporting period.

Scope 2 emissions are similar, but they are considered indirect, meaning the flame is not actually on your property but it is occurring because of you. Generally speaking, this is electricity. Most likely, your real estate asset obtains electricity through a grid connection to an electrical plant. When your property needs electricity, depending on how it is produced where your property is located, the electrical plant is likely creating a flame by burning some type of fuel that in turn produces electricity to be delivered to meet your demand. Like Scope 1 emissions, to measure this, we need to know how much electricity was provided to your property and how that electricity was made. Fortunately, in the United States, the EPA produces standardized data called eGrid data which provides information on how electricity is made for any location. The higher the "mix" of fossil fuels combusted to produce that electricity, the more intense the emissions are related to the electricity.

Scope 3 emissions are where the formula becomes a little less clear. At this point, the registrant must determine if the emission is material when compared to its overall impact. This is also where the role of control enters, particularly for multifamily and triple net real estate. These assets typically have large



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percentages of energy that are being consumed on property owned through the investment but controlled by the resident or tenant. This presents a challenge – how do we know how much energy our residents or tenants use? There are only four options to obtain this data. By far, the easiest is for properties that are master metered. In these properties, the property manager or owner has the utilities in their name and receives those bills for the entire property. They may elect to recover those expenses through billing back those expenses or by including them in the rent, but they do have the data.

But what happens when the bill isn't in the name of the owner or property manager, as is often the case in multifamily and triple net real estate? For properties in jurisdictions that have enacted an energy benchmark reporting law, the data is still obtainable. Benchmarking is when the energy consumption data for a building is measured and then compared against something to better understand its performance. This comparison could be against a standard, such as the ENERGY STAR Portfolio Manager score, or peer buildings of a similar type. Going back to the car example, the benchmark metric used for vehicles is miles per gallon – how many miles you can travel on a gallon of fuel, or how efficiently your vehicle uses the fuel provided to its engine. Over 50 jurisdictions across the United States have passed benchmark reporting laws that require the property to report their annual energy consumption to the local or state jurisdiction. These laws also contain requirements for utility companies servicing these jurisdictions to provide building owners with aggregated, whole-building data.

Where this becomes more challenging is when you are not in one of those jurisdictions, but you still need the data to measure and benchmark your property's performance. Perhaps you have a loan with annual energy reporting requirements, or you are trying to report on the impact of your portfolio as the SEC rules require if the energy is not master metered and there is no law requiring it be provided to the owner, our options are to meter the property or obtain consent from the individual owning the energy account to provide their data to the owner.

Metering can be accomplished in several ways, but it typically involves leveraging technology to measure the energy consumption of a particular area of the property and reporting back separately from the utility meter. This may involve sub-metering each unit, installing sensors, or if a switch gear is present, it might be accomplished by shadow-metering the switch gear of the property. Any metering solution will require the installation of hardware and typically ongoing access to the software.

The fourth option is commonly referred to as green leasing and it incorporates the lessee in their lease agreement providing authorization to the lessor to obtain their energy consumption information from the utility provider. The challenges with this approach are numerous and begin with the lack of any standardization from utility provider to utility provider. This lack of consistency complicates the development of leasing templates and is exacerbated by utility companies having inconsistent approaches to the authorizations, even when presented with them.

The SEC ruling potentially places a spotlight on this data issue and presents a challenge to our industry. If we are required to report our carbon emissions, we cannot do so without the underlying data from which those emissions are calculated. This will require advocacy for access to data and the tools that provide that access, including standardization of the authorization process as well as advances in technology. It's a challenge our industry can address, but it will require working together across multiple jurisdictions. Edit

