Greenwheel Insights

Powering Up: Understanding and assessing power utilities companies' emissions data and targets

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Executive Summary

Companies are under pressure from regulators, investors, and consumers to report high-quality greenhouse gas emissions data, but the world of carbon accounting can be opaque and confusing for investors.

While a number of power utility companies report emissions and have set reduction targets, their clarity and comparability vary widely. Reported data is not always in line with international standards, which themselves are difficult to apply to complex businesses.

This complexity makes it difficult for investors to interpret companies' emissions data and targets, potentially limiting their ability to accurately value companies and meaningfully engage on climate-related topics.

This paper aims to **equip investors with the knowledge and tools necessary to better understand and assess companies' reported emissions data and targets**.

Over five sections (Emissions from Electricity Generation, Emissions from Electricity Transmission, Disconnect Between Decarbonisation Scenarios and Company Data for Combined Utilities, Company Targets, and Data Assurance), this paper **defines terms, outlines best practices and industry standards, and identifies key questions for investors** (on the following page) to ask when interrogating emissions reporting and targets from power utility companies.

There are **three core principles for investors to consider** when interpreting emissions data:

- **Coverage Varies:** companies include different emissions sources under similar categories, which limits their comparability. Additionally, material emissions sources may be excluded from targets.
- **Business Model Matters:** appropriate reporting is largely determined by business model, as are actions that companies can take to decarbonise.
- **It can be difficult to match company data and targets to external decarbonisation pathways:** as a result of the variation in reported data coverage, the emissions modelled in decarbonisation pathways may not be reflective of companies' actual emissions.

Greenwheel Utilities Emissions Data and Targets Assessment

Section	Key Questions for Investors
Emissions from Electricity Generation	**If the company generates electricity, does it report emissions from its own generation?** - Does the company report emissions from its own generation separately, as part of Scope 1, or both? **If the company purchases power to resell to its customers, does it report the associated emissions?** - Does the company report emissions from purchased power separately, as part of Scope 3, or both? **If a company is only a T&D utility, does it report emissions associated with the generation of the electricity it delivers?** **Does the company report on its emissions intensity?** - Does the company report emissions intensity in terms of unit of electricity generated and/or delivered or in terms of revenue? - Does its emissions intensity data refer to its owned generation only, or both its owned generation and purchased power?
Emissions from Electricity Transmission	**If the company only generates electricity, does it also report emissions from electricity transmission?** - What scope are emissions from electricity transmission reported under? **If the company both generates and transmits or supplies electricity, does it report emissions from electricity transmission?** - What scope are emissions from electricity transmission reported under? **If the company is only a T&D utility, does it report emissions from electricity transmission under Scope 2?**
Disconnect Between Decarbonisation Scenarios and Company Data for Combined Utilities	**If the company has a consumer gas business** (e.g., for heating and cooking, not power), **is it a material source of emissions for their business?** - If so, do they report disaggregated emissions from gas and power?
Company Targets	**Does the company have a Net Zero or other carbon-reduction by 2050 target?** - Do they have supporting short- and medium-term targets? **What emissions scopes and sources are covered by the company's target?** - Does the target refer to broad emissions Scopes (e.g., Scopes 1, 2, and 3) or disaggregated emissions sources (e.g., emissions from generation, emissions from purchased power, etc.)
Data Assurance	**What form of assurance has the company sought for the data it collects and reports?** **If the company has limited assurance for emissions data (Scope 1, 2 and/or 3), does it aim to seek reasonable assurance in future?** - If not, why not? **If the company has no assurance for emissions data (Scope 1, 2, and/or 3), does it aim to seek at least limited assurance in future?** - If not, why not?

This Greenwheel Insights piece provides the necessary tools for emission-conscious investors to truly avoid the pitfalls of emission reporting. We consider this methodology to provide transparency and consistency across business models and geographies so that investors can confidently recognize the decarbonisation benefits of our funds.

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Introduction

The power utilities sector covers a wide range of businesses with varied operations and emissions footprints. It is one of the largest global contributors to greenhouse gas emissions (GHGs). Policymakers, regulators, investors, and consumers demand climate action, driving utilities companies to improve their reporting and, in some cases, adopt ambitious GHG reduction targets. However, utilities do not have an accepted, comparable industry standard for applying the Greenhouse Gas Protocol.[i] As a result, emissions reporting and targets are often opaque and confusing for investors.

This paper aims to equip investors with the knowledge and a simple framework to better understand and assess companies' reported emissions data and targets. We review the reporting and target-setting boundaries, as well as the definitions, used by eleven power utilities companies (Centrica, Constellation, Dominion, Edison, EDP, Enel, Exelon, NextEra Energy, RWE, and Terna).

Over 9 sections, this paper defines terms, outlines standards, and identifies key questions for investors when interrogating emissions reporting and targets from power utilities companies. This paper can be used to supplement the Excel-based **Greenwheel Transition Pathways Tool (GTPT).** The GTPT compares reported data and relevant targets from these companies to key Net Zero transition scenarios, including the IEA's Net Zero by 2050 scenario, the One Earth Climate Model (OECM) 1.5 Degree scenario, and the NGFS Net Zero 2050 scenario.

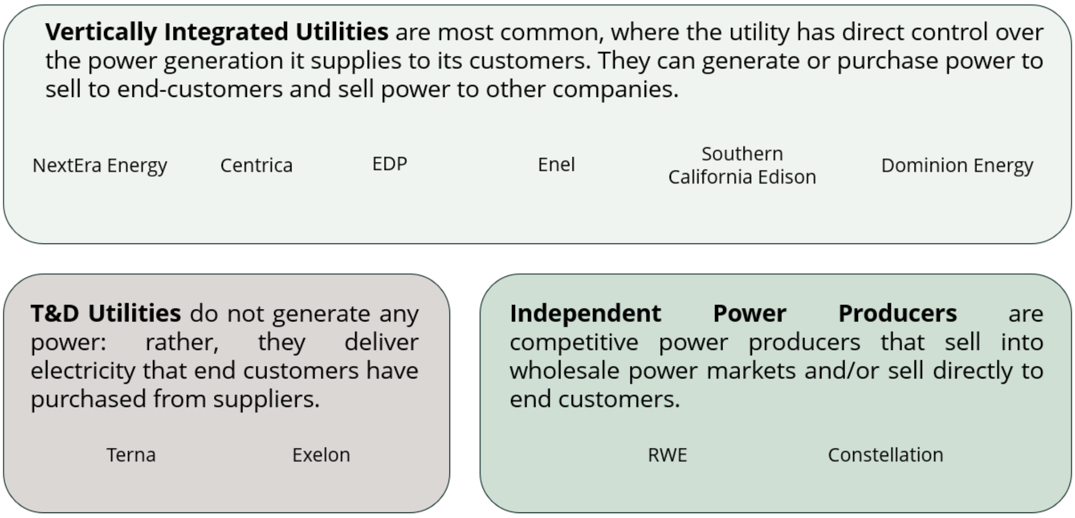
Emissions Reporting Standards and Frameworks for the Power Utilities Sector

The Greenhouse Gas (GHG) Protocol is the most common set of accounting principles for companies to measure, manage, and report GHG emissions from their operations and value chains.[ii] It is considered the international standard for GHG accounting and reporting, but is also subject to limitations for companies with complex operations – in other words, almost all power utilities companies.

Key Business Models

Within the broader power utilities sector, there are three key business models to consider, as demonstrated in Figure 1.

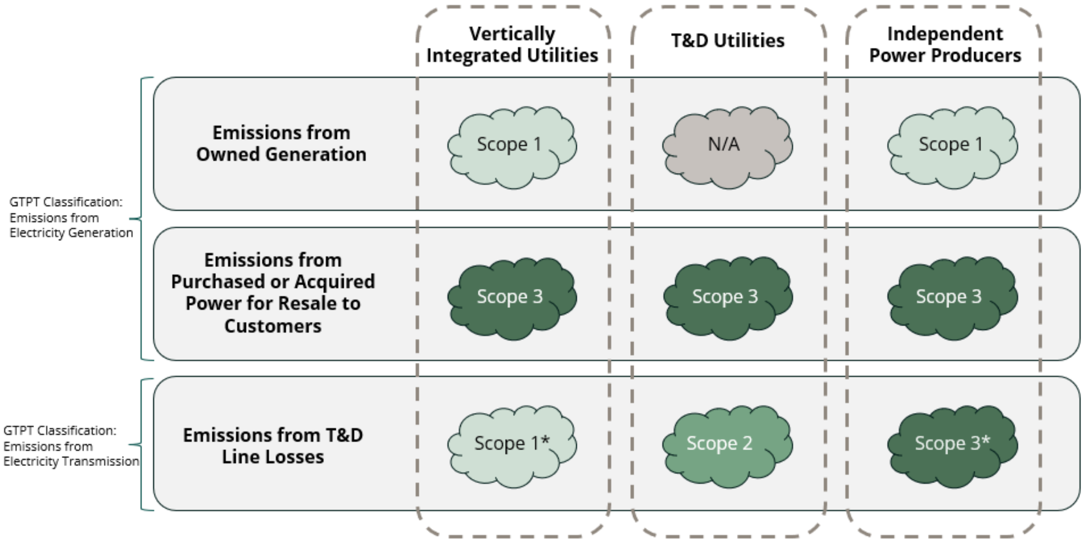
Figure 1: Business Models of Companies in the Utilities GTPT



Source: Greenwheel (2025).

The variety of business models covered by the Power Utilities GTPT and in the sector more broadly means that **investors should take care when comparing reported emissions and targets to scenario pathways**, particularly if they choose to input their own company data. Figure 2 demonstrates how the same emissions sources may be reported by companies with different business models, resulting in a range of emissions profiles across the sector.

Figure 2: Different Business Models Report the Same Emissions Sources Under Different Scopes



* There are differing interpretations for correct reporting of T&D line losses for companies that both generate and transmit electricity

Source: Greenwheel (2025); [EPRI](#) (2024); [GHG Protocol](#) (n.d.).; [GHG Protocol FAQs](#) (n.d.); [Exelon](#) (2023).

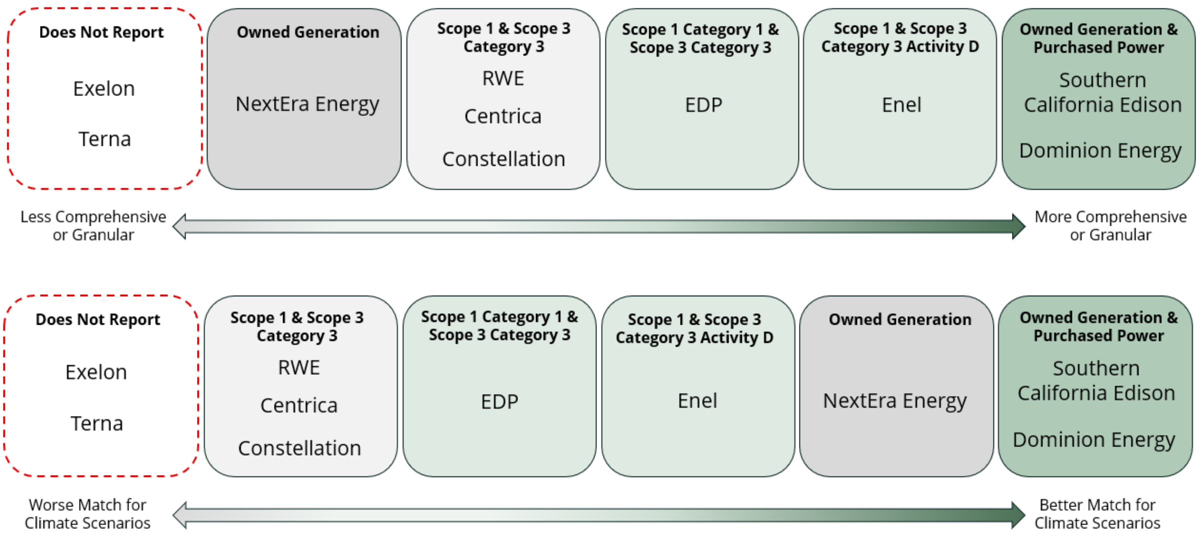
Emissions from Electricity Generation

The main source of emissions for electric utilities is power generation, either from their own operations or from the production of electricity they purchase or transmit.[iii] The inclusion of emissions from purchased power, where relevant, is essential because it gives a more accurate view of the emissions associated with electricity the utility sells to its customers. Generally, disclosure of purchased electricity and its associated emissions is weaker than for companies' own electricity generation.

The categories of owned and purchased power largely map onto Scope 1 Category 1 (stationary combustion) and Scope 3 Category 3 Activity D (generation of purchased electricity that is sold to end users), respectively.[iv] A full table of emissions scopes can be found in the Annex. When companies report in terms of scopes (rather than in terms of owned and purchased electricity), they generally report on Scope 1 and Scope 3 Category 3 as a whole.

As shown in Figure 3, the companies in the GTPT use a variety of different formats for reporting emissions. This somewhat limits their comparability, both to each other and to the decarbonisation scenarios included in the GTPT. Most modelled decarbonisation scenarios provide pathways for electricity generation only, in absolute or intensity terms, and don't directly consider other emitting activities associated with the operation of a power utility (e.g. heating office space).

Figure 3: Reporting for Emissions from Electricity Generation



Source: Greenwheel (2025).

What is Scope 3 Category 3 (Fuel- and Energy-Related Activities)?

Broadly, Scope 3 Category 3 includes upstream emissions associated with fuels and energy acquired and consumed.[v] This category is **a material source of emissions for vertically integrated companies** that have significant electricity retail businesses, like Enel and EDP, and other companies that purchase electricity.

There are four activities under Category 3, but **the most relevant is Activity D**, or the upstream emissions associated with the generation of purchased electricity resold to end users.[vi] This activity is **particularly relevant for utilities that purchase wholesale electricity for resale to their customers**.[vii] Of the eleven companies included in the GTPT, only Enel reports specifically on this category.

Data collection for Scope 3 Category 3 is **challenging because power utilities companies have complex and varied value chains, most purchased fuels are undifferentiated commodities, and it is often difficult to trace the electricity back to a specific generation source**.[viii]

However, **purchased power for resale may not be material for some companies**. For example, only about 1% of NextEra's sold energy mix was purchased power, so their choice to report on only owned generation is representative of their business model and major emissions sources.[ix]

Generation Reporting for Transmission and Distribution Companies

Pure Transmission & Distribution (T&D) companies, like Exelon and Terna, typically do not report emissions associated with the generation of the electricity they transmit. As such, their reported emissions tend to be significantly lower than companies that also generate electricity. However, the GHG Protocol states that the emissions associated with the generation of electricity they transmit should be reported as Scope 3 Category 3.

Table 1: Key Investor Questions: Emissions from Electricity Generation

Key Questions for Investors
If the company generates electricity, does it report emissions from its own generation? - Does the company report emissions from its own generation separately, as part of Scope 1, or both?
If the company purchases power to resell to its customers, does it report the associated emissions? - Does the company report emissions from purchased power separately, as part of Scope 3, or both?
If a company is only a T&D utility, does it report emissions associated with the generation of the electricity it delivers?
Does the company report on its emissions intensity?

- Does the company report emissions intensity in terms of unit of electricity generated and/or delivered or in terms of revenue?
- Does its emissions intensity data refer to its owned generation only, or both its owned generation and purchased power?

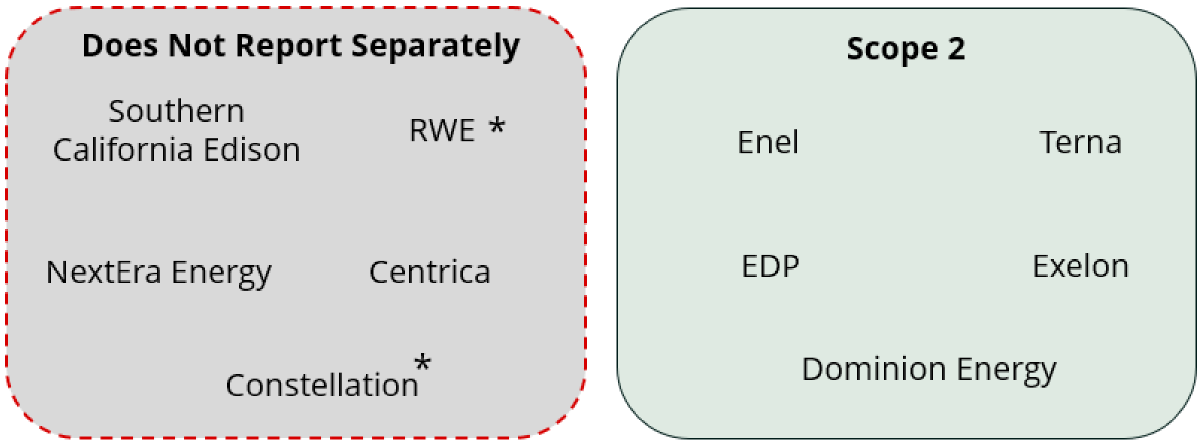
Source: Greenwheel (2025)

Emissions from Electricity Transmission

Simply put, **more electricity is sent out from power stations than is received by final customers**: some is 'lost' to heat on transmission cables and through other equipment.[x]

Pure T&D companies, like Exelon and Terna, **do not own any power generation resources**. The **emissions associated with electricity transmission (line losses) for T&D companies should be reported as part of Scope 2 but are sometimes misreported as Scope 3** Category 3 Activity C (upstream emissions associated with T&D losses).[xi] Scope 3 Category 3 Activity C should only include line losses in systems not owned or operated by the reporting company. This category usually applies only to end-users of electricity. Both T&D companies in the GTPT report emissions associated with line losses under Scope 2 and are included in the GTPT as 'total emissions from electricity transmission'.[xii]

Figure 4: Emissions from Electricity Transmission



** As independent power producers, these companies do not own T&D systems*

Source: Greenwheel (2025)

The GHG Protocol is less clear for companies that both generate and transmit electricity: different interpretations state that companies that generate and transmit electricity can report line losses under either Scope 1, Scope 2, or Scope 3.[xiii] **With this lack of consensus, it is unsurprising that some companies that both generate and transmit electricity,** such as Centrica and Edison**, do not clearly report emissions from electricity transmission**, as shown in Figure 4. Enel, EDP, and Dominion report line losses under Scope 2, although some guidance states that companies that generate electricity and transport it through a T&D system that they own or operate would account for line losses under Scope 1.[xiv]

Table 2: Key Questions for Investors: Emissions from Electricity Transmission

Key Questions for Investors
If the company only generates electricity, does it also report emissions from electricity transmission? - What scope are emissions from electricity transmission reported under?
If the company both generates and transmits electricity, does it report emissions from electricity transmission? - What scope are emissions from electricity transmission reported under?
If the company is a T&D utility, does it report emissions from electricity transmission under Scope 2?

Source: Greenwheel (2025)

Disconnect Between Decarbonisation Scenarios and Company Data for Combined Utilities: Scope 3 Category 11 (Use of Sold Products)

Scope 3, or the indirect emissions that occur in a company's value chain, is particularly thorny for power utilities. **S&P estimates that approximately 75% of emissions from US electric utilities fall into Scope 3.**[1] The two most relevant Scope 3 categories are Category 3 (fuel and energy related activities, discussed above) and Category 11 (use of sold products).[2]

Use of sold products is a material source of emissions for combined electric and gas utilities that deliver natural gas to commercial and residential users or for combustion in other power generation facilities (like some of Exelon's and Dominion's subsidiaries, Enel, NextEra, Constellation, RWE, and Centrica).[3] **The pathways included in the GTPT model emissions from gas and electricity separately**. This makes comparability difficult, as combined utilities often report emissions at a less granular level. This reflects the lack of alignment between the data companies report, reporting guidance, decarbonisation pathways, and companies' actual operations.

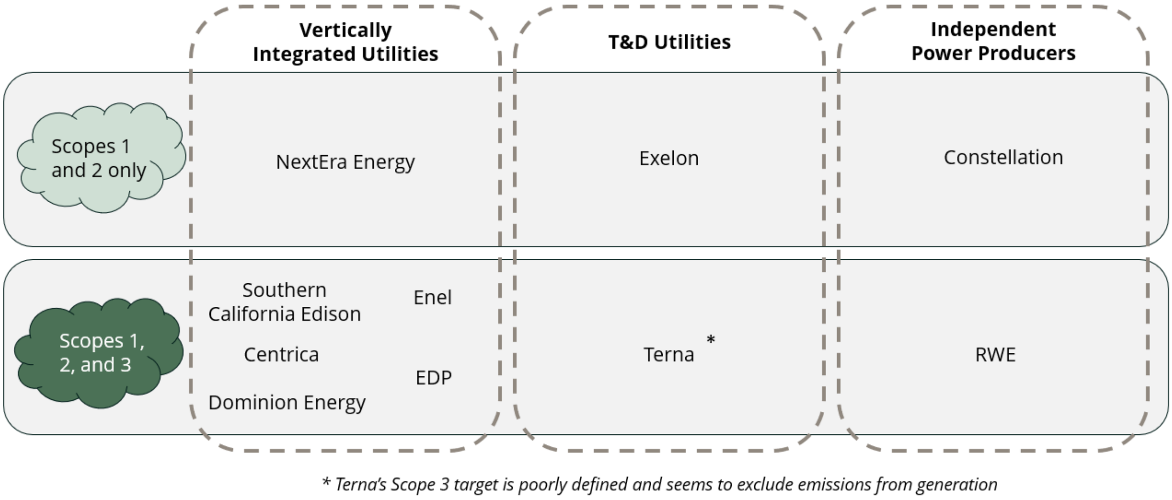
Key Questions for Investors

If the company has a consumer gas business (e.g., for heating and cooking, not power)**, is it a material source of emissions for their business?**

Company Targets

CO_2 reduction targets are indicative of companies' transition plans in the short and long term. As shown in Figure 5, most companies set emissions reduction targets across all Scopes.

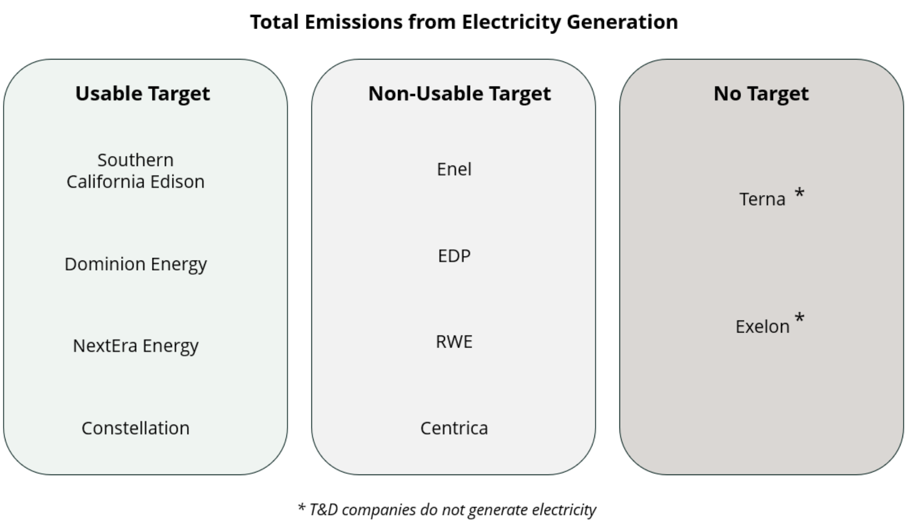
Figure 5: Company Targets by Emissions Scope



Source: Greenwheel (2025)

However, very few of the companies covered in the GTPT have targets that are compatible with the metrics used in key decarbonisation scenarios, as shown in Figures 6, 7, and 8 below. This disconnect reflects the shortcomings of the GHG Protocol for application to complex, non-manufacturing businesses and highlights the difficulty of accurately assessing company alignment to various decarbonisation scenarios. Further, decarbonisation scenarios are not necessarily fit for this purpose: while we can use them to assess company alignment, they are first and foremost intended to model global emissions trajectories.

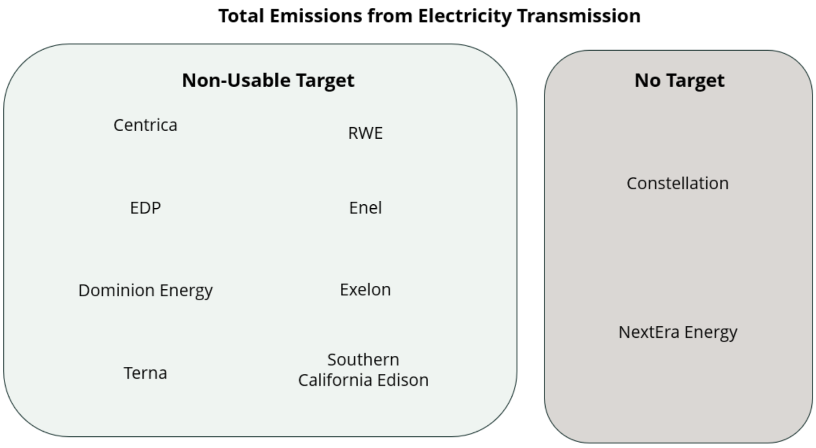
Figure 6: Targets for Total Emissions from Electricity Generation



Source: Greenwheel (2025).

While RWE, EDP, Enel, and Centrica have a variety of emissions targets, the emissions sources they cover do not align with the emissions sources defined by the decarbonisation scenarios. For example, EDP targets a 90% reduction in absolute emissions across all scopes by 2040. However, to compare alignment with decarbonisation scenarios, the target must clearly apply to Scope 1 Stationary Combustion and Scope 3 Category 3 only.[xv] This is not to say that these companies report their emissions incorrectly: rather, it reflects the aforementioned disconnect between company operations, reporting guidance, and decarbonisation scenarios. Therefore, we have omitted these targets from the GTPT.

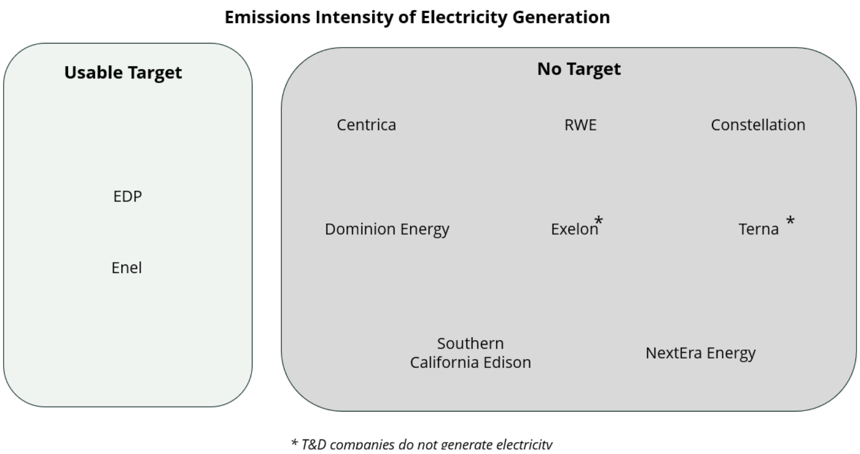
Figure 7: Targets for Total Emissions from Electricity Transmission



Source: Greenwheel (2025).

No company in the GTPT sets an explicit target for reducing emissions from electricity transmission. Generally, their targets are expressed in terms of emissions scopes. For example, Terna sets a target that covers absolute emissions from electricity transmission, but it also includes all Scope 1 and Scope 2 emissions. Thus, it is not compatible with the decarbonisation scenarios in the GTPT, which require targeted emissions from electricity transmission to be reported separately.

Figure 8: Targets for Emissions Intensity of Electricity Generation



Source: Greenwheel (2025).

Only Enel and EDP provide intensity targets that align to both the data they publicly report and the decarbonisation scenarios included in the GTPT.

Table 3: Key Questions for Investors: Company Targets

Key Questions for Investors
Does the company have a Net Zero or other carbon-reduction by 2050 target? - Do they have supporting short- and medium-term targets?
What emissions scopes and sources are covered by the company's target? - Does the target refer to broad emissions Scopes (e.g., Scopes 1, 2, and 3) or disaggregated emissions sources (e.g., emissions from generation, emissions from purchased power, etc.)

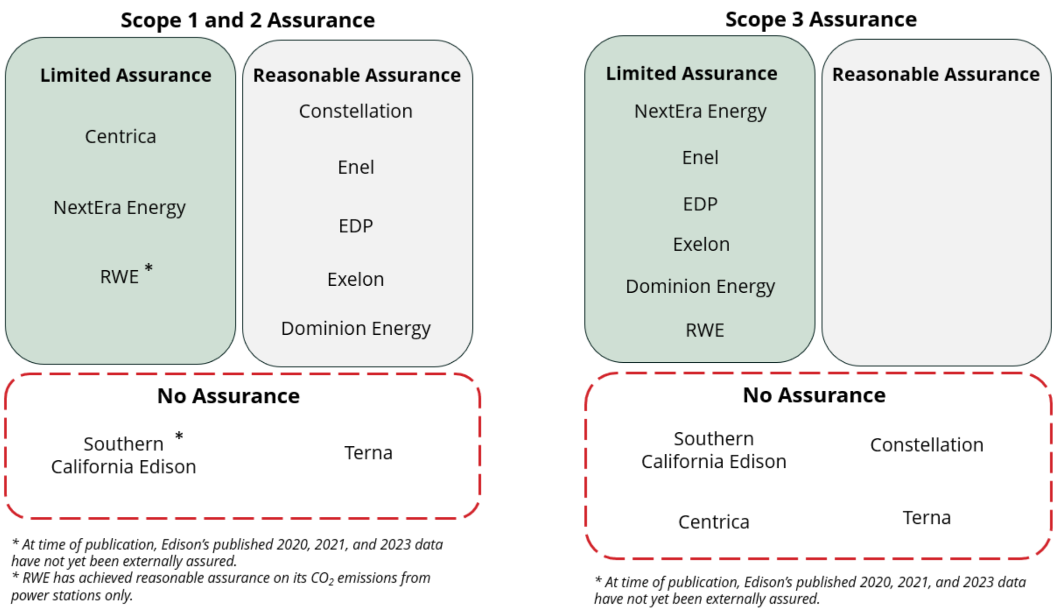
Source: Greenwheel (2025).

Data Assurance

Assurance is conducted by independent third parties and can include verifying that the company's reported data is accurate, assumptions are reasonable, and data processes are effective. Ultimately, the conclusion an assurance process reaches depends on the type of assurance conducted.[xvi] Investors should be aware of the differences between limited and reasonable assurance, shown in Table 2 in the Annex.

Assurance helps companies better comply with sustainability-related regulations, standards, and frameworks, as shown in Table 3 in the Annex. **Assurance is not part of the GHG Protocol but is considered best practice**. It is particularly important for companies that fall under the Corporate Sustainability Reporting Directive (CSRD): **failure to comply with reporting regulations is a significant source of potential risk**.

Figure 9: Data Assurance Levels



Source: Greenwheel (2025).

Limited assurance is most appropriate for companies where the risk of a material misstatement is low and the cost of reasonable assurance is prohibitive, such as for small, office-based businesses. **Given the significance of emissions and size of power utility companies, obtaining a reasonable assurance is more appropriate.**

For Scope 1 and Scope 2 data, the companies assessed in this paper use different types of assurance, as shown in Figure 9 above. For Scope 3 data, these companies tend to have either limited assurance or no assurance. **No assurance means that there has been no external verification that the company's data is accurate, assumptions are reasonable, and processes are effective.**

Table 4: Key Questions for Investors: Data Assurance

Key Questions for Investors
What form of assurance has the company sought for the data it collects and reports?
If the company has limited assurance for emissions data (Scope 1, 2 and/or 3), does it aim to seek reasonable assurance in future? - If not, why not?
If the company has no assurance for emissions data (Scope 1, 2, and/or 3), does it aim to seek at least limited assurance in future? - If not, why not?

Source: Greenwheel (2025).

Challenges and Actions for Decarbonisation

A utility company's ability to effectively decarbonise is largely determined by its business model.

Companies that generate power, like vertically integrated utilities and independent power producers, **have the greatest ability to reduce emissions from their own generation activities**. Actions such as shifting to renewables, retiring emissions-intensive generation facilities, and investing in demand-side management technology can help these companies reduce their Scope 1 emissions and provide lower-carbon power to other users, thus effectively decarbonising the electricity supply.[xvii]

It is very challenging for T&D companies to meaningfully act on their largest source of emissions, Scope 3 emissions from generation, **because in many markets they are not allowed to own or invest in power generation resources**. Rather, they are bound to reliably deliver electricity that is supplied to the grid, regardless of its source. As such, these companies tend to focus on directly reducing their operational emissions by upgrading grid infrastructure to improve efficiency and flexibility.

Conclusion

Electric utilities are a key enabler of decarbonisation across the economy. Thus, investors and companies are increasingly interested in how these companies are decarbonising their operations and the electricity they supply. When evaluating a utilities company's reported emissions and targets, and their alignment with decarbonisation pathways, investors should consider the following:

- **Coverage Varies:** companies include different emissions sources under similar categories, which limits their comparability. Additionally, material emissions sources may be excluded from targets.
- **Business Model Matters:** appropriate reporting is largely determined by business model, as are actions that companies can take to decarbonise.
- **It can be difficult to match company data and targets to external decarbonisation pathways:** as a result of the variation in reported data coverage, the emissions modelled in decarbonisation pathways may not be reflective of companies' actual emissions.

Appendix

Table 1: GHG Protocol Summary Table

Scope	Description	Category	Description	Activity	Description
Scope 1	Direct emissions from a company's owned or controlled sources	1: Stationary Combustion	Direct GHG emissions from stationary (non-transport) combustion of fossil fuels at a facility		
		2: Fugitive Emissions	Direct GHG emissions associated with unintentional releases and leaks, such as refrigerant gases		
		3: Mobile Combustion Emissions	Direct GHG emissions associated with fuel combustion in owned or operated mobile sources		
		4: Process Emissions	Direct GHG emissions released during industrial processes and onsite manufacturing		
Scope 2	Indirect emissions from purchased energy sources	1: Emissions from Purchased Electricity	Indirect GHG emissions resulting from the purchase of electricity, steam, heat, or cooling		
Scope 3	Indirect emissions from assets not owned or controlled by the reporting organization, but in the organization's upstream and downstream value chain	1: Purchased Goods and Services	Extraction, production, and transportation of goods and services purchased or acquired by the reporting company in the reporting year, not otherwise included in Categories 2-8		
		2: Capital Goods	Extraction, production, and transportation of		

			capital goods purchased or acquired by the reporting company in the reporting year		
		3: Fuel- and Energy-Related Activities Not Included in Scopes 1 or 2	Extraction, production, and transportation of fuels and energy purchased or acquired in the reporting year, not already accounted for in Scopes 1 and 2	A: upstream emissions of purchased fuels	extraction, production, and transportation of fuels consumed by the reporting company
				B: upstream emissions of purchased electricity	(extraction, production, and transportation of fuels consumed in the generation of electricity, steam, heating, and cooling consumed by the reporting company)
				C: Transmission and distribution losses	(generation of electricity, steam, heating and cooling that is consumed (i.e., lost) in a T&D system) – reported by end user
				D: Generation of purchased electricity that is sold to end users	(generation of electricity, steam, heating, and cooling that is purchased by the reporting company and sold to end users) – reported by utility company or energy retailer only
		4: Upstream Transportation and Distribution	Transportation and distribution of products purchased by the reporting company in the reporting year between a company's tier 1 suppliers and its own operations (in vehicles and facilities not owned or controlled by the reporting company)		

			Transportation and distribution services purchased by the reporting company in the reporting year, including inbound logistics, outbound logistics (i.e., of sold products), and transportation and distribution between a company’s own facilities (in vehicles and facilities not owned or controlled by the reporting company)		
		5: Waste Generated in Operations	Disposal and treatment of waste generated in the reporting company’s operations in the reporting year (in facilities not owned or controlled by the reporting company)		
		6: Business Travel	Transportation of employees for business-related activities during the reporting year (in vehicles not owned or operated by the reporting company)		
		7: Employee Commuting	Transportation of employees between their homes and their worksites during the reporting year (in vehicles not owned or operated by the reporting company)		
		8: Upstream Leased Assets	Operation of assets leased by the reporting company (lessee) in the the		

			reporting year and not included in Scopes 1 and 2 reported by the lessee		
		9: Downstream Transportation and Distribution	Transportation and distribution of products sold by the reporting company in the reporting year between the reporting company's operations and the end consumer (if not paid for by the reporting company), including retail and storage (in vehicles and facilities not owned or controlled by the reporting company)		
		10: Processing of Sold Products	Processing of intermediate products sold in the reporting year by downstream companies (e.g., manufacturers)		
		11: Use of Sold Products	End use of goods and services sold by the reporting company in the reporting year		
		12: End-of-Life Treatment of Sold Products	Waste disposal and treatment of products sold by the reporting company in the reporting year at the end of their life		
		13: Downstream Leased Assets	Operation of assets owned by the reporting company (lessor) and leased to other entities in the reporting year, not		

			included in Scopes 1 and 2 – reported by the lessor		
		14: Franchises	Operation of franchises in the reporting year, not included in Scopes 1 and 2 – reported by the franchisor		
		15: Investments	Operation of investments (including equity and debt investments and project finance) in the reporting year, not included in Scopes 1 or 2		

Source: Greenwheel (2025); EPA (n.d.); Ecochain, (2024)

Table 2: Key Differences Between Limited and Reasonable Assurance

	Limited Assurance	**Reasonable Assurance**
Emissions Coverage	Audit emissions sources that cover 80-85% of total GHG emissions reported by the company	Audit emissions sources that cover 90-95% of total GHG emissions reported by the company
Positive or Negative Conclusion	Negative (i.e., no evidence has been found to suggest that the information is materially misstated or false)	Positive (i.e., the information is fairly stated or correct in all material respects)
Evidence	Less evidence required A small sample size is used and only certain emission sources within it are audited	More evidence required and pursued more in-depth A large sample size is used to audit the emissions sources
Data Scrutiny	Assumes that input data, collection and reporting processes are reliable	Assesses the existence, design, and effectiveness of the data control systems
Perception of Credibility	Low/Moderate: limited confidence in the conclusion	Moderate/High: high level of confidence in the conclusion
Comparability to Financial Reporting	Similar to an interim or limited review of financial statements	Similar to an audit opinion
Inaccuracy Risk	Higher risk of inaccuracy	Lower risk of inaccuracy

Source: Saunders (2023); KPMG (2024); The Carbon Trust (n.d).; Gruitt (2024); ICAEW (n.d.); CFA Institute (2024).

Table 3: Assurance Requirements for Sustainability-Related Regulations, Standards, and Frameworks

Mechanism	Type	Jurisdiction	Assurance Requirements
Taskforce on Climate Related Financial Disclosures (TCFD)	Framework/ regulation	Regulatory requirement in UK for large listed and financial companies; used globally as voluntary framework	Assurance is not required
CDP	Framework/ disclosure platform	Global	Assurance is not required to disclose using CDP, but assurance of emissions data is necessary to receive an 'A' score and be awarded Leadership Points
GHG Protocol	Standard	Global	Assurance is not required
ISSB	Standard	Global	Assurance requirement is based on the jurisdiction's requirements
Global Reporting Initiative (GRI)	Standard	Global	Assurance is encouraged but not required
Transition Plan Taskforce	Standard	TPT	Assurance is not required
Corporate Sustainability Reporting Directive (CSRD)	Regulation	EU	Limited assurance required, reasonable assurance may be required in the future
Security and Exchange Commission's (SEC) Rule	Regulation	US	Limited assurance on Scope 1 and 2 emissions required, reasonable assurance to be required in the future

Source: The Carbon Trust (n.d).; SEC (2024); Ipieca (2011); GHG Protocol (2004).

Endnotes

i Do you know how to estimate an electric utility's carbon footprint? - GHG and Carbon Accounting, Auditing, Management & Training | Greenhouse Gas Management Institute (ghginstitute.org)
ii GHG Protocol, n.d.
iii https://www.worldbenchmarkingalliance.org/publication/electric-utilities/rankings/
iv Technical Guidance for Calculating Scope 3 Emissions, 2022; Calculation Tool for Direct Emissions from Stationary Combustion, 2005
v Scope 3 Greenhouse Gas Emissions Accounting for Electric Companies and Combined Utilities: A Compendium of Technical Briefing Papers and Frequently Asked Questions
vi Scope 3 Greenhouse Gas Emissions Accounting for Electric Companies and Combined Utilities: A Compendium of Technical Briefing Papers and Frequently Asked Questions
vii Chapter3.pdf
viii *3002029198_Scope 3 Greenhouse Gas Emissions Accounting for Electric Companies and Combined Utilities_ A Compendium of Technical Briefing Papers and Frequently Asked Questions (1).pdf
ix NextEra, 2022

x *Microsoft Word - Greening TD.doc
xi Scope 3 Greenhouse Gas Emissions Accounting for Electric Companies and Combined Utilities: A Compendium of Technical Briefing Papers and Frequently Asked Questions
xii https://ghgprotocol.org/calculation-tools-faq#general_accounting_questions_id
xiii *ghg-protocol-revised.pdf; ghg_protocol_2004_appendix_a.pdf; Electricity: How to Correctly Report Emissions | Ecometrica
xiv Calculation Tools FAQ | GHG Protocol; Electricity: How to Correctly Report Emissions | Ecometrica
xv CTP Progress Report 2023_EN_vFinal.pdf
xvi The Carbon Trust, n.d.; Gruitt, 2024; Simic, Luo, and Datt, 2022
xvi Strategies to Achieving Deep Decarbonisation in Power Generation: A Review - ScienceDirect; A zero-carbon power grid and the electrification of heavy industry: how to deliver on a twin challenge - Aldersgate Group

Key Information

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