

RESEARCH REPORT | MARCH 2026

CSRD Energy Infrastructure Sector Report

Aggregated sustainability report analysis
51 companies | FY 2023–2025

51

Companies
Analysed

76%

With Formal
GHG Targets

53%

SBTi
Validated

~12

No Transition
Plan

EXECUTIVE SUMMARY

The credibility gap: ambition versus action in European energy infrastructure

The first mandatory CSRD reporting cycle for the European energy infrastructure sector has produced something more revealing than a compliance record. It has produced a stress test — and the results show exactly where the gap between climate ambition and verifiable action sits.

This report synthesises disclosures from 51 companies across 19 European countries, spanning electricity producers, transmission and distribution operators, integrated utilities, and construction and equipment companies. For the overwhelming majority, FY 2024 marks their first year of mandatory reporting under the Corporate Sustainability Reporting Directive.

The headline finding is not that the sector is failing. It is that the sector is splitting. On one side: companies like Ørsted, Enel, TenneT and Iberdrola, whose CSRD disclosures function as genuine operational management tools — granular, Board-governed, and built around science-based accountability. On the other: companies that have filed disclosures acknowledging, in plain language, that no transition plan exists, that targets have not been set, and that no date has been determined for doing so.

That gap is widening. And with SBTi validation now a majority practice at 53% of the sample, the 47% without it are increasingly exposed to investor scrutiny.

“The compounding advantage of early action is becoming visible in this data. The gap between the leading tier and the rest is widening with each reporting cycle.”

— KEY ESG Analysis, March 2026

Three findings that define the landscape

First: E1 Climate Change and S1 Own Workforce are universal material topics, reported by all 51 companies without exception. The sector has no disagreement about what is material — only about what to do about it.

Second: SBTi validation has become the de facto credibility benchmark. With 53% of the sample now holding validated targets, absence of SBTi engagement no longer reads as a neutral position. It reads as an outlier that requires explanation.

Third: Scope 3 remains the critical frontier. Even among the most advanced reporters, supply chain emissions present the most significant data, methodology and target-setting challenges. At least half the sample carries material gaps.

KEY FINDINGS AT A GLANCE

<p>E1 + S1</p> <p>Universal topics</p> <p>E1 Climate Change and S1 Own Workforce material for all 51 companies without exception.</p>	<p>76%</p> <p>Formal GHG targets</p> <p>39 of 51 companies have set quantified GHG reduction targets. Six have no formal targets at all.</p>	<p>53%</p> <p>SBTi validated</p> <p>27 companies hold fully validated targets. 6 committed/pending. 18 have no SBTi engagement.</p>
<p>~12</p> <p>No transition plan</p> <p>The most significant disclosure gap — several high-emission operators explicitly acknowledge the absence of any plan.</p>	<p>90%</p> <p>E4 Biodiversity material</p> <p>46 of 51 companies identify biodiversity as material: the highest-rated non-climate ESRs standard.</p>	<p>50%+</p> <p>Scope 3 gaps</p> <p>At least half the sample carries material gaps in supply chain emissions reporting.</p>

ABOUT THIS REPORT

Metric	Detail
Total companies	51
Reporting periods	FY 2023–2025 (majority FY 2024)
Countries	19 European countries
Largest groups	Germany (7), Italy (6), Spain (5), Switzerland (3), Netherlands (3), Norway (3), Poland (3), Finland (3), Greece (3)
Sub-sectors	Electricity production (~31), Transmission & distribution (~13), Construction & infrastructure (3), Other (3)

ABOUT THE AUTHOR



KEY ESG is a leading provider of sustainability and carbon reporting software designed for private equity and infrastructure investors. Our technology enables granular, asset-level data collection and harmonised reporting across frameworks such as CSRD, SFDR and ISSB. By transforming sustainability reporting from a compliance obligation into a strategic advantage, KEY ESG empowers investors and portfolio companies to unlock measurable value, enhance transparency and drive long-term sustainable growth.

1

The Credibility Gap: Where Ambition Meets Reality

The most analytically striking feature of this first mandatory CSRD cycle is not the volume of disclosure. It is the distribution. Across 51 companies, reporting quality spans an extraordinary range — from disclosures that represent genuine best-in-class practice to filings that openly acknowledge the absence of even basic climate strategy.

That distribution is not random. It correlates, broadly, with how early a company committed to science-based targets, Board-level governance of climate risk, and granular Scope 3 measurement. The companies that invested early are now reaping a compounding advantage: their disclosures are richer, their transition plans are more credible, and their investor conversations are more straightforward. The companies that did not invest early are now more exposed.

The cases that define the gap

The starkest illustrations of the ambition-action gap appear at both ends of the spectrum.

Ørsted's FY 2025 disclosure is the most mature CSRD document in the full sample. The company achieved its science-based Scope 1+2 intensity target of 10 g CO₂e/kWh in 2025 — a 93% reduction from 2018 — and reached 99% renewable energy generation. This is not an aspiration. It is a completed transformation, documented with three-year longitudinal data.

"In 2025, we met our science-based scope 1-2 GHG emissions intensity reduction target of 10 g CO₂e/kWh, making Ørsted the first energy company to complete a green transformation of its own energy production."

— Ørsted, Annual Report 2025

At the other end, PGE Polska Grupa Energetyczna — Poland's largest GHG emitter — discloses explicitly that it has not adopted a transition plan, has not set specific targets with baselines, and has not set a date for doing so. TAURON's actual 2024 emission intensity of 704 kg CO₂/MWh runs at more than four times its former 2025 target: the widest aspiration-performance gap in the sample.

"As of the date of publication of this Statement, PGE CG had not yet adopted a formally approved document on the above matters [transition plan for climate change mitigation]... As at the date of publication of the report, PGE CG has not set a date for adopting a Transition Plan."

— PGE Polska Grupa Energetyczna, Management Board Report FY2024

Perhaps the most paradoxical case is EDPR, a pure-play renewables company with 19.3 GW of installed capacity. Despite its operational profile, EDPR has no formal transition plan and its SBTi commitment has been pending since June 2023 with no published timeline. The Alpiq case is equally striking: the company states a net-zero 2040 target but with no baseline year, no interim milestones, and Scope 1 emissions rising 8% year-on-year, while simultaneously disclosing openness to expanding its gas-fired generation portfolio.

What the gap means for the next reporting cycle

CSRD's value as a disclosure framework depends on comparability. As the leading tier produces increasingly granular, Board-governed, science-based disclosures, the informational asymmetry between that tier and the rest becomes more visible to investors, lenders and regulators — not less. The first cycle has established what best practice looks like. The second cycle will show who has moved toward it.

PGE Polska Grupa Energetyczna

Explicitly discloses it has not adopted a transition plan, has not set specific targets with baselines, and has not set a date for doing so. As Poland's largest GHG emitter, this represents the widest gap between operational impact and disclosure maturity in the sample.

TAURON

Actual 2024 emission intensity (704 kg CO₂/MWh) is more than four times its former 2025 target. This is the widest aspiration-performance gap in the sample.

Nuclearelectrica

Explicitly states there was no transition or emissions reduction plan in FY 2024, and that current targets are not compatible with 1.5°C scenarios.

Alpiq

Net-zero 2040 stated but with no baseline year, no interim milestones, no SBTi, and Scope 1 emissions rising 8% year-on-year. The company is openly considering expanding its gas-fired generation portfolio.

EDPR

A paradoxical case: a pure-play renewables company with 19.3 GW capacity but no formal transition plan and SBTi pending since June 2023 with no timeline for submission.

2 Materiality: Common and Outlier DMA Topics

All 51 companies conducted double materiality assessments (DMAs) in accordance with ESRS requirements. The findings below synthesise materiality outcomes across the full sample, distinguishing between standard ESRS topical standards and entity-specific material topics.

Universal topics (all 51 companies)

E1 Climate Change is material for every company without exception — the most consistently and deeply reported topic, typically receiving the most detailed disclosure with standalone chapters or sections. S1 Own Workforce is likewise universal, with consistent coverage of working conditions, health and safety, diversity and equal treatment.

The universality of E1 is not surprising. What is notable is the gap between universal recognition of climate as a material topic and the quality and credibility of climate response across the sample. All 51 companies identify climate change as material. Approximately 12 have no transition plan for addressing it.

Near-universal topics (85–95% of companies)

Topic	Coverage	Notable Exclusions
G1 Business Conduct	48/51 (94%)	TenneT, RWE, Alpiq
E4 Biodiversity and Ecosystems	46/51 (90%)	Alliander, Arendals Fossekompani, Stedin, SMA Solar, Electrica
S2 Workers in the Value Chain	46/51 (90%)	Stedin, ZSE, PPC, Electrica, Alpiq
E5 Resource Use and Circular Economy	44/51 (86%)	EPSO-G, Uniper, GEK TERNA, PPC, REN, Electrica, Alpiq

Frequently material (60–80% of companies)

S3 Affected Communities is material for 76% of companies, most consistently by electricity producers and construction companies with significant land-use footprints. S4 Consumers and End-Users (61%) is the most variably reported social topic, frequently excluded by generation-only companies and TSOs. E2 Pollution (59%) is commonly excluded by pure renewable producers and network-only operators.

E3 Water and Marine Resources is the most frequently excluded ESRS topic, material for just 53% of companies. Only entities with significant water dependencies — hydropower, nuclear, construction — consistently find it material.

“24 of 51 companies identified at least one entity-specific material topic, revealing sector risks not captured by the standard ESRS framework — from nuclear safety and cybersecurity to fair energy transition and grid resilience.”

— KEY ESG Analysis, March 2026

Entity-Specific Material Topics

The most analytically valuable addition to the standard ESRS list comes from the 24 companies that identified entity-specific material topics. These disclosures reveal strategic priorities and sector risks that the standard framework does not capture.

- Nuclear safety and radioactive waste: TVO, Nuclearelectrica, Fortum, EDF, Axpo. TVO's reporting of nuclear safety, availability and cybersecurity as three distinct entity-specific topics could serve as a model for the nuclear sub-sector.
- Cybersecurity and data protection: Flagged by ten companies including REN, Terna, TVO, ZSE, Ellevio, Fingrid and Elia Group — reflecting critical infrastructure exposure and growing grid digitalisation risks.
- Energy security and supply reliability: TenneT, EPSO-G, Stedin, BKW, Edison and Cloudberry identify supply security or favourable transition frameworks as entity-specific concerns.
- Grid resilience: Enel identifies Resilient Grids (grid maintenance) as an entity-specific material topic, reflecting its role as a major distribution operator.
- Fair energy transition: EDPR's identification of Fair Energy Transition — reskilling and job creation — is distinctive and forward-looking.

3 GHG Reduction Targets and SBTi Alignment

<p>76%</p> <p>Have formal GHG targets</p> <p>39 of 51 companies have set quantified GHG reduction targets. Six have no formal targets at all.</p>	<p>53%</p> <p>SBTi validated</p> <p>27 of 51 companies hold fully validated targets. A further six are committed or pending.</p>	<p>6</p> <p>No formal targets</p> <p>PGE, GEK TERNA, EDPR, Electrica, PNE, Nuclearelectrica</p>
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SBTi validation: from aspiration to accountability benchmark

SBTi validation has emerged as the de facto credibility benchmark across the sample. With 53% of companies now holding fully validated targets, the framework has crossed a significant threshold: it is now a majority practice, not a leading-edge indicator. That shift has a direct consequence for the 47% without it — absence of SBTi engagement increasingly positions a company as an outlier requiring investor explanation, rather than a reasonable position on a spectrum of approaches.

Companies with SBTi-validated targets consistently demonstrate more structured, quantified and credible transition plans than those without. The correlation is not accidental: the discipline of SBTi validation forces companies to confront the specificity of their decarbonisation pathways in ways that self-declared targets do not.

Status	Count	Selected Companies
SBTi validated	27 (53%)	Ørsted (net-zero), Iberdrola (net-zero), Enel (1.5°C), E.ON (1.5°C), TenneT (1.5°C), RWE (1.5°C), ENGIE (WB2°C), EnBW (1.5°C), ERG (net-zero)
Committed / pending	6 (12%)	Stedin, TVO, EDF, EDPR (pending since June 2023), Electrica (targeting 2028), Ellevio
No SBTi engagement	18 (35%)	PGE, GEK TERNA, TAURON, Enea, PNE, Nuclearelectrica, Uniper, Axpo, Alpiq, A2A, Statkraft, VERBUND, EPSO-G and others

Net-zero commitments and target years

Net-zero target years cluster into three distinct bands, reflecting different strategic postures and regulatory contexts.

Target Band	Companies
2040 (most ambitious)	ERG, ACCIONA, EZ, Cloudberry, E.ON (Scope 1+2), Ørsted, Fortum, Iberdrola, RWE, Endesa, Enel, GEA Group, Vattenfall, Uniper, PPC, Alpiq (Scope 1+2), Axpo (Scope 1+2)
2045–2050 (EU policy aligned)	E.ON (Scope 3), EDF, A2A, ENGIE (2045), Alliander, PGE, Stedin, Redeia, VERBUND, Hera, BKW (Scope 3), Ellevio (2045), Elia Group
No net-zero commitment	Nuclearelectrica, PNE, GEK TERNA, Electrica, Enea, TVO (own operations 2030 only), TenneT, Fingrid, SMA Solar, Terna (committed to define within two years)

4 Decarbonisation Trajectory

The overall assessment of transition plan credibility across the 48-company sample (excluding companies with no climate disclosure) reveals a wide spectrum of maturity — from sector-leading exemplars that have already completed their transformation, to companies at the earliest stages of climate strategy development.

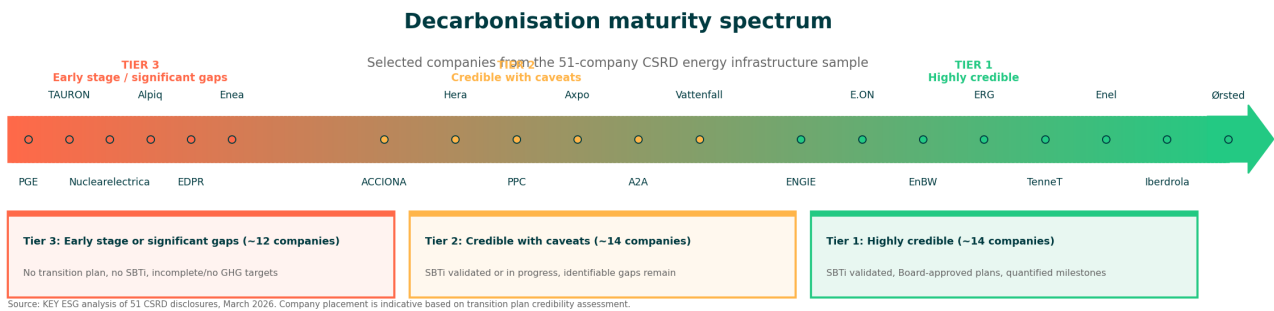


Figure 1: Decarbonisation maturity spectrum — selected companies from the 51-company sample

Tier 1: Highly credible transition plans (~14 companies)

The strongest transition plans combine SBTi-validated targets, Board-approved plans, quantified decarbonisation levers, clear interim milestones and transparent disclosure of residual challenges. What distinguishes these disclosures is not optimism — it is specificity.

- Ørsted** — Completed green transformation; 99% renewable generation in 2025; Scope 1+2 intensity reached 10 g CO₂e/kWh, down 93% from 2018. The most mature CSRD document in the full sample.
- iberdrola** — SBTi Net-Zero certified 2040 target with interim milestones. Over €160bn invested. 8.5 GW of thermal capacity already retired, demonstrating action, not aspiration.
- Enel** — Four SBTi 1.5°C-validated targets covering 91% of emissions; 2024 performance ahead of schedule; no offsets for 2030 targets; €38bn CapEx 2025–2027.
- E.ON** — SBTi 1.5°C, Carbon Management Plan by business unit, €43bn investment programme.
- TenneT** — SBTi validated; 95% Scope 1+2 reduction target; advanced supply chain programme; diesel-free fleet achieved in the Netherlands in 2024.
- ENGIE** — Board-approved plan updated December 2024; 77 material IROs mapped; coal phase-out in continental Europe by 2025, globally by 2027.
- EnBW** — The only company to publish a standalone, publicly available Climate Transition Plan (April 2024), covering decarbonisation levers, CapEx alignment, social dimensions and climate risk management.
- ERG** — Among the first two in Italy to achieve SBTi Net-Zero certification; explicit commitment to no carbon credits or offsets; supply chain engagement targets 75% of suppliers (>\$1m) to have SBTi by 2030.

Tier 2: Credible with caveats (~14 companies)

Substantive targets and developing transition plans, but with identifiable gaps. Examples include ACCIONA (SBTi validated but missed 2024 Scope 3 targets under rapid growth), Hera (Board-approved plan but structural locked-in emissions from waste-to-energy), Axpo (detailed plan with measure-level specificity, but missed SLB renewable targets for two consecutive years), and PPC (SBTi validated but legacy lignite assets create execution risk).

Tier 3: Early stage or significant gaps (~12 companies)

Companies at the weakest end of the spectrum share common characteristics: no formal transition plan, incomplete or no GHG targets, and no SBTi engagement. The most notable cases illustrate the extremes of the credibility gap.

PGE Polska Grupa Energetyczna

Explicitly discloses it has not adopted a transition plan, has not set specific targets with baselines, and has not set a date for doing so. As Poland's largest GHG emitter, this represents the widest gap between operational impact and disclosure maturity in the sample.

TAURON

Actual 2024 emission intensity (704 kg CO2/MWh) is more than four times its former 2025 target. This is the widest aspiration-performance gap in the sample.

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— KEY ESG Analysis, March 2026

5 Infrastructure-Specific Risks and Opportunities

Most Frequently Flagged Risks

Risk	Coverage	Detail
Physical climate risks	~49 companies	Virtually every company identifies acute risks (extreme weather) and chronic risks (altered precipitation, rising temperatures, sea-level rise). VERBUND conducts a dedicated three-year CLIMPACT4VERBUND project using CMIP6 models for site-level assessment.
Regulatory and transition risks	~42 companies	Evolving carbon pricing, changing environmental regulation and energy policy uncertainty. Coal-heavy companies (TAURON, Enea, PGE, Uniper) face the most acute regulatory risk.
SF6 phase-out risk	~12 companies	SF6 has 23,500x the greenhouse effect of CO2 and is currently unavoidable in transmission switchgear. TenneT notes no alternatives currently exist for 150 kV GIS switchgear.
Stranded asset exposure	~14 companies	Most acutely felt by coal-dependent companies (TAURON, Enea, PGE) and gas infrastructure operators (ENGIE, Hera, Edison, BKW, Ignitis).
Grid congestion	~8 companies	The pace of renewable integration outstripping grid capacity. ZSE notes ~15,000 small power sources added to its distribution area in a single year.
Supply chain dependencies	~10 companies	Flagged by Ørsted (forced labour risks), TenneT (copper, aluminium, steel), Iberdrola (Xinjiang supply chain concerns). TenneT estimates over 80% of Scope 3 from production, transport and installation of major grid assets.

Most Frequently Flagged Opportunities

Opportunity	Coverage	Detail
Renewable energy expansion	All 51	Universal strategic pillar. E.ON (€43bn 2024–2028), RWE (€35bn 2025–2030), A2A (€16bn), Terna (€17.7bn), ENGIE (€21–24bn at 82% Taxonomy-aligned).
Grid modernisation & digitalisation	~25	Dominant opportunity for TSOs/DSOs. ZSE invested a record €210m in 2023. Ellevio identifies AI, data centres and industrial electrification as major demand growth drivers.
Hydrogen economy	~10	VERBUND, Uniper, TenneT, EPSO-G, Ignitis, Iberdrola and PNE identify hydrogen as a medium-to-long-term strategic opportunity.
Green finance & Taxonomy alignment	~20	Standout performers: Ørsted (99% Taxonomy-aligned CapEx), Ellevio (99%), E.ON (98%), ZSE (79.4%), ENGIE (82% planned).
Circular economy & climate adapt.	~15	ERG targets 98% material recovery from wind repowering. METLEN's secondary aluminium achieves significant energy savings. ACCIONA and BKW offer climate adaptation services.

6 Best Practices: Sector Benchmarks for the Next Reporting Cycle

The following companies demonstrate sector-leading approaches that set a practical benchmark for FY 2025 reporting. What they share is not perfection — it is specificity, accountability and transparency about both progress and remaining challenges.

Ørsted — Completed green transformation

The three-year longitudinal view (FY 2023–2025) demonstrates a company that has genuinely completed its transformation. In 2025, Ørsted achieved its science-based Scope 1+2 intensity target of 10 g CO₂e/kWh (down 93% from 2018) and reached 99% renewable energy generation.

ERG — SBTi net-zero with explicit no-offsets policy

Among the top 15 globally and first two in Italy to obtain SBTi Net-Zero certification. ERG's explicit commitment to achieving net-zero without carbon credits is a strong differentiator. Supply chain engagement targets 75% of suppliers (>\$1m) to have SBTi by 2030.

Iberdrola — Sector-leading CSRD disclosure

All 10 ESRS standards reported with full DMA. SBTi Net-Zero certified 2040 with interim milestones. Over €160bn invested. Integration of human rights due diligence, including a Human Rights Risk Map. 8.5 GW of thermal capacity already retired.

TenneT — Supply chain decarbonisation and SF₆ management

The most rigorous supply chain decarbonisation framework in the sample: MoUs with key suppliers (Siemens Energy on recycled copper), activity-based Scope 3 methodology across 35+ procurement categories, and diesel-free fleet achieved in the Netherlands in 2024.

VERBUND — Quantified decarbonisation levers

Provides estimated GHG reductions per lever in kt CO₂e, with implementation status for each action. The CLIMPACT4VERBUND project uses CMIP6 models across 126 locations. A €500m green bond with a biodiversity component is a further standout.

Enel — Four-target SBTi architecture and TNFD early adoption

Four SBTi 1.5°C targets break decarbonisation into discrete business-line targets, each with its own baseline, milestones and coverage percentage. 2024 performance consistently exceeds targets: Scope 1 intensity reached 101 gCO₂eq/kWh against a target of 140.

Elia Group — Transparent treatment of structural constraints

Provides an unusually candid explanation of why its carbon footprint, dominated by grid losses, is structurally beyond a TSO's direct control under EU unbundling rules. The structured ActNow programme with five-year roadmaps demonstrates thoughtful entity-specific materiality.

ACCIONA — Internal carbon pricing

Sophisticated carbon budgeting system covering 90% of the emissions footprint, with quarterly monitoring, internal carbon price, and a dedicated decarbonisation fund. WACI methodology applied at pre-bid stage for construction projects.

“Grid losses are an inevitable and inherent part of electricity transmission and represent by far the biggest share of Elia Group's Scope 1 and Scope 2 carbon footprint. Their GHG emissions impact is directly dependent on the generation sources of the electricity flowing through the grid. The power mix is beyond our area of responsibility as a TSO.”

— Elia Group, Sustainability Statement, E1-1

7 Sector-Level Observations

ESRS compliance is widespread but uneven in depth

All 51 companies have conducted DMAs and report against ESRS. However, maturity varies dramatically — from Hera's 25 individually assessed sub-themes and ENGIE's 77 mapped IROs, to early-stage reports from Nuclearelectrica and PNE that openly acknowledge significant gaps. Convergence toward consistent quality will take multiple reporting cycles.

SBTi validation is the de facto credibility benchmark

Companies with SBTi-validated targets consistently demonstrate more structured and credible transition plans. With 53% of the sample now validated, absence of SBTi engagement increasingly positions companies as outliers requiring investor scrutiny.

Scope 3 remains the critical frontier

Even among the most advanced reporters, supply chain emissions present the greatest challenges. TenneT's shift from spend-based to activity-based Scope 3 across 35+ procurement categories represents current best practice. The sector's capital-intensive nature means Scope 3 from construction materials is often the dominant emission category for network operators.

Network operators occupy a distinctive position

TSOs and DSOs face the most favourable decarbonisation narrative: their core business (grid expansion) is inherently Taxonomy-aligned. However, their largest emissions (grid losses, SF6, construction materials) have physical and technological limits not fully addressed. SF6 phase-out is an underappreciated cross-sector risk.

The coal transition creates acute reporting challenges

Central and Eastern European companies (TAURON, Enea, PGE) face the most acute tension between regulatory instability and CSRD disclosure requirements. These cases illustrate a structural challenge: CSRD demands forward-looking commitments from companies whose decarbonisation pathways depend materially on national policy decisions outside their control.

Transition plans are generally in development

Only approximately 10–12 companies have published mature, Board-approved transition plans that meet the spirit of ESRS E1-1. This is consistent with first-year reporting expectations but creates an informational asymmetry for investors.

Entity-specific topics reveal strategic priorities

The 24 companies that identified entity-specific material topics provide the most analytically valuable disclosures. Convergence of Southern European TSOs on innovation and service quality as entity-specific topics suggests these should be considered for sector-specific guidance.

Red flags and greenwashing indicators

Most significant red flags: vague commitments without baselines (GEK TERNA, PGE, Electrica, Alpiq); missing Scope 3 data across approximately half the sample; emission increases despite stated targets (SMA Solar +6%, Alpiq Scope 1 +8% year-on-year); stated openness to expanding fossil generation while claiming net-zero commitment (Alpiq); and TAURON's four-fold gap between actual emissions and former targets.

Biodiversity is the next reporting frontier

E4 Biodiversity is material for approximately 87% of the sample, but disclosure quality varies enormously. Fortum's separate biodiversity transition plan with quantified MSA.km2 assessments, Enel's TNFD-LEAP methodology, and Redeia's geospatial sensitivity mapping represent the leading edge. Most companies remain at an early stage with policy statements rather than quantified targets.

CONCLUSION

The Imperative for Action

The first mandatory CSRD cycle for the European energy infrastructure sector has produced a rich and varied evidence base. The headline is not that the sector is failing. It is that the sector is dividing, and the divide is becoming harder to obscure.

E1 Climate Change and S1 Own Workforce are universal material concerns. SBTi validation is now a majority practice and the credibility threshold for institutional investors. And biodiversity is fast becoming the next systemic reporting challenge after climate.

The gaps are equally clear. Scope 3 emissions remain materially incomplete across at least half the sample. Formal transition plans are absent or nascent at approximately 12 companies, including some of the highest-emitting operators in the sample. And the structural challenges facing coal-dependent Central and Eastern European utilities — where CSRD disclosure obligations outpace the political certainty required to set credible targets — present a systemic informational asymmetry for investors and lenders.

The compounding advantage of early action is now visible in this data. Companies that invested early in science-based targets, Board-level governance of climate risk, and granular Scope 3 measurement — Ørsted, Enel, TenneT, Iberdrola, ENGIE — are consistently demonstrating that their disclosures are not compliance artefacts but operational management tools. The gap between this tier and the rest is widening with each reporting cycle.

How KEY ESG supports the energy infrastructure sector

KEY ESG is a leading provider of sustainability and carbon reporting software designed for PE-backed infrastructure portfolios and CSRD-obligated companies. Our platform enables the granular Scope 1, 2 and 3 data collection, double materiality assessment workflow, and ESRS-aligned reporting that the findings in this report highlight as the defining differentiators between sector leaders and laggards.

By transforming sustainability reporting from a compliance obligation into a strategic intelligence asset, KEY ESG empowers infrastructure operators, PE fund managers and corporate ESG leads to move from disclosure to decision-making — and to close the credibility gap before the next reporting cycle.

[Book a demo or learn more at keyesg.com](https://keyesg.com)

REFERENCE INDEX

Companies Included in This Analysis

All 51 CSRD sustainability reports analysed in this research are publicly available. The full library of CSRD disclosures, including all reports referenced below, can be accessed via the KEY ESG CSRD Reports Library at keyesg.com/article/access-the-first-wave-of-csrd-reports. The library currently covers 944 reports across 38 countries and 13 SASB industry sectors.

944 reports **38 countries** **13 SASB sectors** **3 reporting years**

#	Company	Country	Sub-sector	Period	Report Source
1	A2A S.p.A.	Italy	Multi-utility	FY 2024	a2a.eu/en/investors
2	ACCIONA S.A.	Spain	Construction, renewable energy, water	FY 2024	accionacom/shareholders-investors
3	Alliander N.V.	Netherlands	Electricity and gas distribution	FY 2024	alliander.com/en/investors
4	Alpiq Group	Switzerland	Electricity production	FY 2024	KEY ESG CSRD Library
5	Arendals Fossekompagni	Norway	Industrial investment (hydropower)	FY 2024	KEY ESG CSRD Library
6	Axpo Holding AG	Switzerland	Electricity production	FY 2024/25	KEY ESG CSRD Library
7	BKW Group	Switzerland	Electricity, networks, infrastructure	FY 2024	KEY ESG CSRD Library
8	CEZ, a.s.	Czech Republic	Electricity production and distribution	FY 2024	cez.cz/en/investors
9	Cloudberry Clean Energy	Norway	Renewable electricity production	FY 2023	KEY ESG CSRD Library
10	E.ON SE	Germany	Energy networks and retail	FY 2024	eon.com/en/investor-relations
11	EDF S.A.	France	Electricity production and distribution	FY 2024	edf.fr/en/the-edf-group/investors
12	Edison S.p.A.	Italy	Electricity production, gas supply	FY 2024	KEY ESG CSRD Library
13	EDP Renovaveis (EDPR)	Spain	Renewable electricity generation	FY 2024	edpr.com/en/investors
14	Electrica Group	Romania	Electricity distribution and supply	FY 2024	KEY ESG CSRD Library
15	Elia Group S.A.	Belgium	Electricity transmission (TSO)	FY 2024	investor.eliagroup.eu

#	Company	Country	Sub-sector	Period	Report Source
16	Ellevio AB	Sweden	Electricity transmission and distribution	FY 2024	KEY ESG CSRD Library
17	EnBW AG	Germany	Integrated energy utility	FY 2024	enbw.com/annual-report-2024/
18	Endesa SA	Spain	Integrated energy utility	FY 2024	endesa.com/en/investors
19	Enea SA	Poland	Integrated energy (incl. coal, mining)	FY 2024	KEY ESG CSRD Library
20	Enel S.p.A.	Italy	Integrated utility	FY 2024	enel.com/investors/sustainability
21	ENGIE SA	France	Electricity production, gas, services	FY 2024	engie.com/en/journalists
22	ERG S.p.A.	Italy	Renewable electricity production	FY 2024	ergspasostenibilita.it/en
23	EVN AG	Austria	Electricity production, distribution	FY 2023/24	KEY ESG CSRD Library
24	Fingrid Oyj	Finland	Electricity transmission	FY 2025	fingrid.fi/en/investors
25	Fortum Oyj	Finland	Electricity production, heating	FY 2025	fortum.com/investors
26	GEA Group AG	Germany	Equipment/technology for food & industry	FY 2024	gea.com/en/investors/annual-report
27	GEK TERNA	Greece	Construction, electricity production	FY 2024	KEY ESG CSRD Library
28	Hera Group	Italy	Multi-utility	FY 2024	gruppohera.it/en/investors
29	Iberdrola S.A.	Spain	Electricity production and transmission	FY 2024	iberdrola.com/shareholders-investors
30	Ignitis Grupe AB	Lithuania	Integrated utility	FY 2024	KEY ESG CSRD Library
31	METLEN Energy and Metals	Greece	Integrated energy and aluminium	FY 2024	KEY ESG CSRD Library
32	Nuclearelectrica (SNN)	Romania	Electricity production (nuclear)	FY 2024	KEY ESG CSRD Library
33	Orsted A/S	Denmark	Renewable electricity production	FY 2023–2025	orsted.com/en/investors

#	Company	Country	Sub-sector	Period	Report Source
34	PGE Polska Grupa Energetyczna	Poland	Conventional and renewable production	FY 2024	gkpge.pl/en/ir
35	PNE AG	Germany	Renewable energy development	FY 2024	KEY ESG CSRD Library
36	Public Power Corporation (PPC)	Greece	Electricity production and distribution	FY 2024	dei.gr/en/investor-relations
37	Redeia	Spain	Electricity transmission	FY 2024	redeia.com/en/shareholders-and-investors
38	REN	Portugal	Electricity and gas transmission	FY 2024	ren.pt/en/investors
39	RWE AG	Germany	Electricity production (diversified)	FY 2024	rwe.com/investor-relations
40	SMA Solar Technology	Germany	Solar technology / inverter manufacturing	FY 2024	KEY ESG CSRD Library
41	Statkraft AS	Norway	Electricity production	FY 2024	statkraft.com/investors
42	Stedin Holding NV	Netherlands	Electricity and gas distribution	FY 2024	KEY ESG CSRD Library
43	TAURON Polska Energia SA	Poland	Electricity production and distribution	FY 2024	KEY ESG CSRD Library
44	TenneT Holding BV	Netherlands/Germany	Electricity transmission (TSO)	FY 2024	tennet.eu/investors
45	Terna / Rete Elettrica Nazionale	Italy	Electricity transmission	FY 2024	terna.it/en/investors
46	TVO (Teollisuuden Voima Oyj)	Finland	Electricity production (nuclear)	FY 2024	KEY ESG CSRD Library
47	UAB EPSO-G	Lithuania	Gas and electricity transmission	FY 2024	KEY ESG CSRD Library
48	Uniper SE	Germany	Electricity production (multi-fuel)	FY 2024	uniper.energy/investors
49	Vattenfall AB	Sweden	Electricity production and distribution	FY 2023	group.vattenfall.com/investors
50	VERBUND AG	Austria	Electricity production, transmission	FY 2024	verbund.com/en/investors
51	ZSE Group	Slovakia	Electricity distribution and supply	FY 2023	KEY ESG CSRD Library