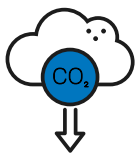


Net zero: Electric utilities



25% of human-caused greenhouse gas emissions come from power generation.¹ What does the **electric utilities sector** need to do to reach net zero?

LGIM will vote and implement investment sanctions against companies falling short of our climate expectations. LGIM expects companies' boards to oversee and publicly disclose answers to the following:



Net-zero commitment

- Does the company have a comprehensive target for net zero by 2050 or earlier, covering scopes 1, 2 and material scope 3 emissions?²
- Has the company made a commitment to certify/certified this target with the SBTi or other external independent parties as they develop?
- Does the company have a net-zero transition plan that includes short- and medium-term targets?³



Strategy

- What are the actions and investments embedded in the company's plan to reach net zero, and the contribution of each to meeting its targets?⁴
- Are there restrictions on investing in new thermal coal power plants and extending the capacity/lifespan of existing coal fleets?
- Is executive remuneration aligned with the short- and/or medium-term emission targets, as set in the net-zero transition plan?
- Does the company's decarbonisation strategy address and incorporate the impact of the Just Transition?
- Does the company's net zero strategy consider the potential impacts and dependencies on biodiversity – for example, in relation to land-use change/ biofuel production/ offsetting?



Resilience

- Has the company analysed the physical climate risks to its assets and operations and evidenced measures to manage them?
- Has the company analysed the resilience of its business model in – and its alignment to – climate scenarios, including the IEA's net-zero by 2050 scenario?



Targets

- Does the company have a commitment to produce carbon-free electricity by 2035 in advanced economies, and by 2040 globally?
- Does the company have targets to reduce other (non-carbon) pollutants?



Collaboration

- How is the company working collaboratively across its value chain to reduce emissions (e.g. demand management, appliance efficiency, engaging with property developers, strategic R&D partnerships etc.)?
- Is the company advocating meaningful policy action, including from regulators, to meet global net zero targets (e.g. with carbon pricing)?



Red lines

- Does the company have a target for phasing out unabated coal by 2030 in advanced economies, and 2040 globally?
- Does the company have a target to reduce its material scope 3 emissions?
- Does the company disclose its climate-related lobbying activities, including trade association memberships, and explain the action it will take if these are not aligned with a 1.5°C scenario?

1. Victor, Geels & Sharpe (2019).

2. Aiming to cover all segments of the business, as articulated within the GHG protocol guidance.

3. Short-term refers to 2022 - 2025, medium-term 2026-2035 and long-term 2036-2050.

4. E.g., reducing electricity generation from the use of fossil-fuels, increasing investment in renewable generation, demand side flexibility (inc. smart charging EVs), interconnections, storage, and network infrastructure.

Further areas for company consideration

Biodiversity expectations

Why? The climate and nature crises are inextricably linked.⁵ Net zero requires both emission avoidance and sequestration. Functioning natural systems are essential to this but increasingly vulnerable due to climate change.

LGIM's expectations: An assessment of the impacts and dependencies on nature and biodiversity, and appropriate mitigation actions.

Sector-specific considerations: Direct impacts could result from building utility infrastructure, significant water use, damming and waste disposal. Indirect impacts could result from financing of poor offsetting practices, the use of biofuels, and upstream fossil fuel extraction.



Company levers

- Renewable energy
- Hydrogen/biomethane into gas grids
- Battery storage
- Demand response software
- Fossil fuel phase-out
- Combined heat and power (CHP)

Government policies

- Country-wide electrification and emission plans
- Investments in grid and interconnections
- Market reform and pricing (including carbon price) to encourage demand-led flexibility and decentralisation
- Support for a 'Just Transition'
- Air quality and emission standards



Challenges



Opportunities

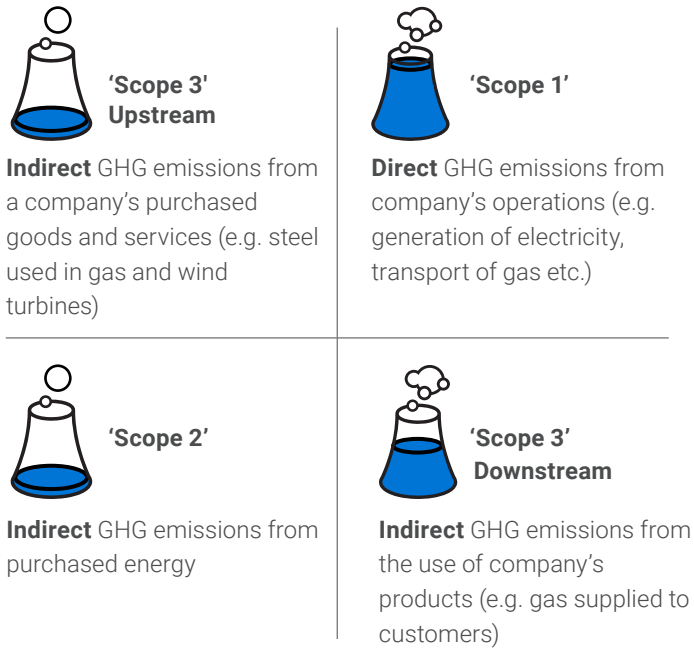


What is needed?

		What is needed?		
		Company leadership	Research and innovation	Consumer behaviour
Storage and variability	Reduced costs for retail and corporate consumers	Investments for an orderly and swift transition Technology adoption	Software	Growing demand for clean power from retail and corporate customers
Infrastructure and markets designed around old, centralised model	Power market reform and decentralisation		Combined heat and power	
Lack of interconnection	Energy independence		CCS	
Public attitudes	Carbon capture and storage (CCS) potentially combined with bioenergy Improved health and air quality			

5. UN IPCC-IPEBS, [Biodiversity and Climate Change workshop report \(2021\)](#)

Sources of emissions



Source: Victor, Geels & Sharpe (2019)

'Just Transition' considerations

Potential implications for employees, supply chain, customers and communities from the transition to a lower-carbon business model

Localised employment amid a shifting energy system

Physical risk impacts

Grid damage from extreme weather

Spikes in energy demand from cooling and heating as a result of extreme weather



For more information and to see how companies are rated

- [Climate Impact Pledge 2022 - Net zero: going beyond ambition \(lgim.com\)](#)
- [LGIM Climate Impact Pledge score](#)
- [LGIM Climate Impact Pledge](#)

Important information

Source: LGIM as at August 2022. The value of an investment and any income taken from it is not guaranteed and can go down as well as up, you may not get back the amount you originally invested. The above information does not constitute a recommendation to buy or sell any security.