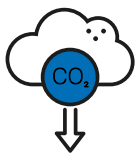


Net-zero: Electric utilities

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 it develops?
- 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 emissions targets, as set out 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 integrate an assessment of the related nature risks and opportunities, impacts and dependencies – for example, in relation to land-use change/ biofuel production/ offsetting?



Resilience

- Has the company analysed its business model resilience to climate-related risks and opportunities using scenario analysis (including the IEA's net-zero by 2050 scenario and a 'business as usual' scenario) and disclosed how the output has influenced its strategy?
- Has the company analysed the physical climate risks to its assets and operations, including potential financial impacts, and evidenced measures to mitigate or adapt to them?



Targets

- Does the company have a commitment to produce carbon-free electricity by 2035 in advanced economies, and by 2040 globally?



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/advocacy 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

Nature expectations

Why? The climate and nature crises are inextricably linked.⁵ Climate change is one of the five direct drivers of nature change. Net-zero requires both emission avoidance and sequestration. Therefore, the inter-dependencies between climate and nature are a critical factor in the transition.

LGIM's expectations: An assessment of the impacts and dependencies on nature and biodiversity, and appropriate mitigation actions.⁶

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



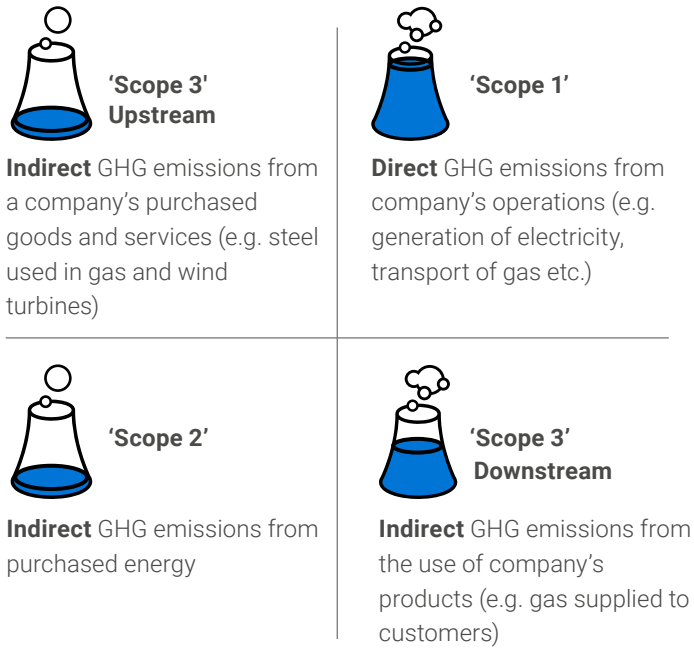
What is needed?

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

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

6. [LGIM's Nature Framework can be accessed here](#)

Sources of emissions



Source: Victor, Geels & Sharpe (2019).

'Just Transition' considerations

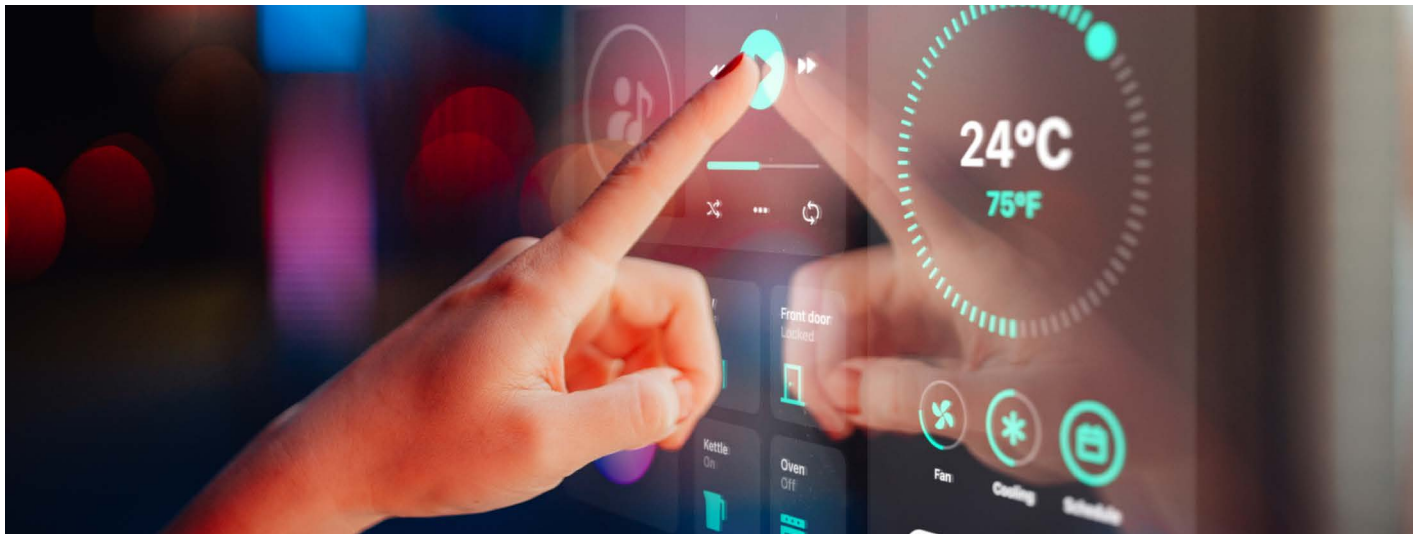
Potential implications for employees, supply chain, customers and communities from the transition to a lower-carbon business model

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

[LGIM Climate Impact Pledge score](#)

[LGIM Climate Impact Pledge](#)

Important information

Source: LGIM as at November 2024. The value of an investment and any income taken from it is not guaranteed and can go down as well as up, and the investor may get back less than the original amount invested.

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