S&P Global
Ratings

Environmental, Social, And Governance Evaluation

National Grid PLC

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Summary

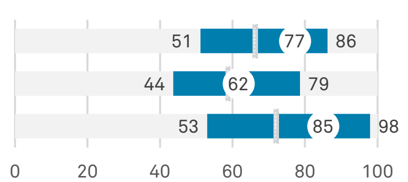
Headquartered in London, National Grid PLC (NG) is an energy company with regulated electricity and gas networks and some unregulated operations in the U.K. and U.S. In the U.K., NG owns the high-voltage electricity transmission system in England and Wales, and it operates the electricity transmission network across Great Britain. In 2021, NG acquired Western Power Distribution PLC, the U.K.'s largest electricity distribution business. NG also owns the U.K. gas transmission system, but has agreed to sell a 60% share in it to a consortium of investors, with an option to sell the remaining 40% within a year. In the U.S., NG owns and operates electricity and gas distribution networks in New York and Massachusetts, electricity transmission facilities across the Northeast, and it owns 3.8 gigawatts of generation in Long Island, New York. Unregulated operations include interconnectors, renewables, and liquified natural gas services, among others.

Our ESG evaluation of 83 on NG reflects the company's robust governance structure, strong preparedness for disruptions, and overall effective risk-management system. We believe the board is diverse with strong expertise and independence. NG shows strong awareness of risks that could interfere with its strategic goal of enabling the energy transition and uses robust scenarios to establish flexible action plans, although political and regulatory dynamics could challenge execution. This, coupled with its sophisticated innovation capabilities, supports NG's long-term resilience.

We view NG's climate strategy as more advanced than those of global peers and its waste management as industry leading. The company's networks are reliable and relatively affordable. Community relations are generally positive, although NG is exposed to community opposition in the U.S. We believe that safety is well managed, with a robust approach for high-hazard assets and plans for aging pipe upgrades. The company also benefits from a diverse workforce and its talent strategy focuses on the energy transition, which aligns with its strategic goals.

ESG Profile Components (figures subject to rounding)

Entity-specific assessment			Sector/region analysis			Achieved and attainable scores
E (30%)	41	+	E (30%)	36	=	E
S (30%)	33	+	S (30%)	29	=	S
G (40%)	52	+	G (40%)	33	=	G



Entity within its primary sector/region

Entity's sectors/ regions versus all sectors/ regions

Min and max scores possible given sectors/regions. The gray line represents performance in line with industry standards.

ESG Profile 76

Preparedness +7

Low	Emerging	Adequate	**Strong**	Best in class

ESG Evaluation

83

A higher score indicates better sustainability. Figures subject to rounding.

Component Scores

Environmental Profile

Sector/Region Score	36/50
Greenhouse gas emissions	Strong
Waste and pollution	Leading
Water use	Good
Land use and biodiversity	Strong
General factors (optional)	None
Entity-Specific Score	41/50
E-Profile (30%)	**77/100**

Social Profile

Sector/Region Score	29/50
Workforce and diversity	Strong
Safety management	Strong
Customer engagement	Good
Communities	Good
General factors (optional)	-2
Entity-Specific Score	33/50
S-Profile (30%)	**62/100**

Governance Profile

Sector/Region Score	33/35
Structure and oversight	Strong
Code and values	Strong
Transparency and reporting	Strong
Financial and operational risks	Neutral
General factors (optional)	None
Entity-Specific Score	52/65
G-Profile (40%)	**85/100**

ESG Profile (including any adjustments) **76/100**

Preparedness Summary

NG is strongly prepared to remain resilient as the energy system decarbonizes to meet global climate commitments. Its long-term strategy focuses on enabling the energy transition, delivering service to customers efficiently, enhancing its organizational capabilities, and empowering its talent. The company's long-standing strategic focus on climate change and its deliberate emphasis on maintaining flexible action plans help NG to pivot nimbly as regulations change and new technologies become commercially viable. However, decision-makers must manage political agendas and regulatory dynamics when executing strategic priorities. Nonetheless, the group continues to innovate and invest in new techniques and technologies to foster greater penetration of renewable energy into electricity systems and low-carbon alternatives for its gas network. These factors reinforce NG's ability to navigate and adapt its systems to remain resilient to the disruptive forces facing its industry, in our view.

Capabilities	
Awareness	Excellent
Assessment	Excellent
Action plan	Excellent
Embeddedness	
Culture	Good
Decision-making	Good

Preparedness Opinion (Scoring Impact) **Strong (+7)**

ESG Evaluation **83**

Note: Figures are subject to rounding.

Environmental Profile

77/100

Sector/Region Score (36/50)

NG operates mainly in the electric grid (about 70% of assets) and gas utility (30%) sectors. The energy transition is the most material environmental risk for these sectors given toughening greenhouse gas (GHG) regulations globally. They also face waste impacts from construction activities, along with land and biodiversity impacts on distribution corridors. Climate impacts, which can damage assets and disrupt operations, also pose a material risk, and we factor in moderate natural disaster exposure for NG's operations in the U.S. (45% assets) and U.K. (55%).

Entity-Specific Score (41/50)

Note: Figures are subject to rounding.

Greenhouse gas emissions	Waste and pollution	Water use	Land use and biodiversity	General factors
Strong	**Leading**	**Good**	**Strong**	**None**

NG is more advanced than global peers in the energy transition. We anticipate its GHG emissions will continue to decline (after a 65% drop from 1990-2021) and remain below those of peers. In 2020, the company set incremental targets to reduce emissions 80% by 2030 and 90% by 2040 versus 1990 levels, and to achieve net zero by 2050. NG's near-term targets have been validated by the Science-Based Target Initiative. These include reducing scope 3 GHG emissions 37.5% by 2034, which we consider to be a strength relative to peers. We view this set of commitments as ambitious yet realistic, as regulations drive regional power systems to decarbonize. The company is decarbonizing its gas network and the heating sector through programs aimed at efficiency, demand response, and leak-prone pipe replacement. In line with the group's fossil-free vision by 2050, NG is exploring heat and gas alternatives, such as hybrid heating and hydrogen, the latter being more advanced than non-European peers, but still in early stages. In 2021, sulphur hexafluoride (SF6) emissions reached 263 ktCO2e (-22% compared with 2019 baseline). We expect NG's SF6 leakages will continue declining as it phases out assets and introduces SF6-free technologies, in line with company's target to cut SF6 emissions 50% by 2030. In 2020, the group launched the brand National Grid Renewables for its U.S. business, whose investments will further support GHG mitigation. Ahead of many industry peers, NG assesses physical climate risk impacts and extreme weather, and has systematic initiatives to improve asset resilience, including storm hardening in the U.S. and flood mitigation in the U.K.

NG is a leader in establishing and embedding circular economy principles in waste-management practices. The company has a track record of achieving the ambitious targets set (reuse or recycle 100% of recovered assets by 2020) and introduced updated commitments involving reaching zero waste to landfill in construction projects by 2026. Material scarcity issues are evaluated using a detailed assessment tool before sourcing, and NG works with suppliers on circular principles to design assets to be disassembled, repaired, or reused at end of life. We view this engagement as industry leading.

NG's approach to land management is also more advanced than peers' and emphasizes delivering environmental value. It differentiates itself through its natural capital assessment protocol for nonoperational land at U.K. sites, which provides an indicative financial value of ecosystem services and guides mitigation and enhancement strategies. In the U.S., NG plans to use quantitative and qualitative approaches to improve habitat conditions. Additionally, NG monitors and mitigates its impact on marine biodiversity during projects' implementation.

Social Profile

62/100

Sector/Region Score (29/50)

The most material social risks for the electric grid and gas utility sectors involve maintaining reliable and affordable networks. Community relations can also be material, especially during network upgrades. Safety is generally well managed, but high-impact events can occur. Strikes from largely unionized workforces, aging talent, and skills shortages also pose risk.

Entity-Specific Score (33/50)

Note: Figures are subject to rounding.

Workforce and diversity	Safety management	Customer engagement	Communities	General factors
Strong	**Strong**	**Good**	**Good**	**-2**

NG maintains reliable and relatively affordable networks that meet strict regulatory standards. Reliability is in line with the industry, as measured by standard outage duration. U.K. tariffs will likely continue facing regulatory scrutiny, which will ensure rates remain affordable. In this regard, we view positively NG's ongoing efforts to provide reliable and affordable network services, despite ongoing geopolictical conflict and the growing impact of inflation on commodity prices. The company is investing in effiency measures and working with the regulator to return above predefined cap-returns from interconnectors to customers early this year. Despite this set of initiatives, customer trust declined to 62.4% in fiscal 2022 (year ended March 31) from 66.2% in fiscal 2021, though notably this only includes U.S. customers.

Community relations are generally positive and its framework for monitoring reputational issues is more developed than peers'. However, NG operates in densely populated areas, which exposes it to heightened risk of community tensions. In the recent past, its New York gas supply proposals drew local opposition. Further gas system upgrades might strain community relations, especially in New York where there is strong support to transition away from fossil fuels. Nevertheless, we see the robust set of community engagement initiatives developed by the company, with educational, transparency, and collaboration purposes, as a useful tool for reducing the risk of project opposition. Additionally, communities' involvement in the early stages of projects' development may promote the offering of more reliable services.

NG has a strong safety-management system compared to industry peers. We note that NG missed its yearly target on workforce injury rates in 2021, reaching 0.13 in the Lost Time Injuries Frequency Rate (LTIFR), instead of 0.10. Nevertheless, we expect that the solid safety-management system it has in place, which covers both its direct workforce and contractors', will lead to a performance improvement in fiscal 2023, and we will monitor its progress overtime. Finally, in fiscal 2022, NG recorded zero fatalities for both employees and contractors, maintaining one of the best performances in the industry.

NG's robust talent-management strategy focused on skills to support its net-zero objective is more targeted than that of many peers. Additionally, the strategy's emphasis on recruiting graduates interested in the energy transition supports talent attraction. In line with the cross-industry trend, NG's total turnover rate increased to 11% in 2021/2022 (7% in 2020/2021). That said, its workforce diversity of 38.6% (which refers to gender, sexual orientation, ethnicity diversity, and persons with a disability) remains high compared with peers', especially at the company's top managerial levels (49.5%). NG has improved its relationship with stakeholders. However, our analysis factors in the reputational effects of NG's sometimes contentious public negotiations with key stakeholders.

Governance Profile

85/100

Sector/Region Score (33/35)

NG is a public company, headquartered in the U.K., which has strong institutions and corporate governance practices that are considered as best practice internationally. Of its assets, 45% are in the U.S., where governance standards are slightly lower than in the U.K.

Entity-Specific Score (52/65)

Note: Figures are subject to rounding.

Structure and oversight	Code and values	Transparency and reporting	Financial and operational risks	General factors
Strong	**Strong**	**Strong**	**Neutral**	**None**

NG's governance features an effective board composition and governance practices that align with international best practices. In recent years, several nonexecutive directors joined the board, resulting in an average board tenure of two years. The board remains very engaged, and the new appointments have improved its independence (83% overall, with all committee chairs being independent) as well as diversity by gender (42% women) and ethnicity (16% non-white). Directors' origins represent NG's operational territories, and their skillsets reflect business needs. The board has five committes including a safety and sustainability committee (previously the safety, environment, and health committee) that has an increased focus on the company's sustainability strategy. The company also conducts extensive annual board evaluations and establishes improvement plans to ensure members have relevant skills, with a tailored induction program and continuous development throughout their tenure, which we view as best practice. In addition, NG ensures ongoing dialogue between the board and employees, which gives members more insight into daily operations to support more effective oversight.

NG has established a strong and coherent value framework across its footprint that meets global standards. The company's clearly articulated values support its vision of being at the heart of a clean, equitable, and affordable energy future. In our view, this framework is relevant, aligned with environmental and social values, and applied in practice via its decarbonization programs and green financings. Executive remuneration is in line with industry standards and incentives largely reinforce its strategy, with variable pay linked to financial, operational (10% of which are linked to Scope 1 reduction and improvement of employee diversity), and individual targets. During the annual general meeting in July 2022, a new remuneration policy was approved. Under it, 20% of long-term variable remuneration will be dedicated to ESG, including net-zero transition measures, which we view as a strong practice. NG also established extensive policies for ethical behavior and has a coherent code of conduct applied across its operations and supply chain, with training and mechanisms to ensure compliance.

Disclosure and reporting practices are more comprehensive than those of global peers, covering a wide range of financial and nonfinancial metrics, policies, governance information, and taxation issues. NG releases an integrated annual report that merges financial and sustainability information. Sustainability metrics have been reported consistently since 2001, which enables historical analysis. Financial disclosures are in line with peers', with no major restatements. In addition, NG has issued Task Force on Climate-Related Financial Disclosures reports for five consecutive years. NG is also one of the first U.K. companies to publish a climate transition plan and one of the first companies globally to publish EU Taxonomy alignment.

Preparedness Opinion

Strong
(+7)

Preparedness	Low	Emerging	Adequate	Strong	Best in class

NG is strongly prepared to remain resilient as the energy system decarbonizes to meet global climate ambitions. Its long-term strategic priorities involve enabling the energy transition while delivering service to customers efficiently, enhancing its organizational capabilities, and empowering its talent. Its long-standing strategic focus on climate change and its deliberate emphasis on maintaining flexible action plans enable NG to pivot nimbly as regulations change and new technologies become commercially viable. The group continues to innovate and invest in new techniques and technologies to foster greater penetration of renewable energy into electricity systems and low-carbon alternatives for its gas network. These factors reinforce NG's ability to navigate and adapt its system to remain resilient to the disruptive forces facing its industry.

Climate change, social and political dynamics, and technological disruptions are key areas of focus for the board, which demonstrates a keen and nuanced understanding of NG's dynamic risk landscape. Using advanced scenarios, which involve considering risks individually and in clusters, the board explores the cumulative impact and interdependencies of risks and how they might affect the resilience of NG's business model. This, coupled with board members' diverse expertise in areas such as cyber risk and technology, supports flexibile strategic thinking and informs its deliberate approach to embedding optionality in strategic plans. For example, it is exploring a range of long-term plans to decarbonize its natural gas business, including hydrogen blending, renewable natural gas from food waste, and other pilot projects to test the feasibility of various gas alternatives. This ultimately enables NG to adapt its strategic execution as market, technology, and regulatory dynamics evolve.

Sustainability is core to NG's long-term strategy and guides its strategic investments. This includes its development of interconnectors linking the U.K., France, Belgium, the Netherlands, Norway, and Denmark, which will enable 90% of imported energy to come from renewables by 2030. We also expect its acquisition of Western Power Distribution will strengthen NG's role in driving the U.K.'s net-zero ambitions by expanding access to the U.K. electricity value chain and facilitating energy efficiency and other low-carbon initiatives via electricity suppliers and with end users.

NG's highly innovative capabilities further enhance its strategic objectives. NG focuses on emerging opportunities in clean energy innovation, competitive energy transmission, offshore wind, and carbon capture, usage, and storage. Through NGV, its non-networks operations business, NG learns about new innovations and develops and invests in energy projects, technologies, and partnerships that reinforce and accelerate its clean energy objectives. For example, NG is leveraging its subsea electricity cables expertise for Revolution Wind, a 704-megawatt, U.S.-based offshore wind project. NG is also partnering in Zero Carbon Humber, a consortium exploring a carbon capture, usage, and storage system and hydrogen production facility to form the first zero-carbon industrial cluster. It also emphasizes employee-led innovation through initiatives such as entrepreneur-led speaker series and employee immersions, to develop entrepreneurial leaders. Talent attraction emphasizes its decarbonization goals, which might support some cultural shifts as new recruits are embedded, but its large scale across the U.S. and U.K. may impede how fast it can shift its workforce culture, in our view.

NG is subject to regulatory scrutiny for capital expenditures and must manage political agendas, which could affect strategy execution. In some cases, short-term political tenures might interfere with long-term asset planning, but the board monitors these dynamics closely.

Appendix

Sector And Region Risk

Primary sector(s)	Utility Networks
Primary operating region(s)	United Kingdom United States

Sector Risk Summary

We base our sector analysis on NG's operations in the utility networks sector, which we split across the electric grid and gas utility subsectors based on the breakdown of NG's asset base.

Environmental exposure

The regulated utility network sector's exposure to environmental risks stems from its infrastructure assets and exposure to the environmental characteristics of entities across value chains. These networks are generally viewed as having high responsibility for ensuring clean water and air and helping to transition to a lower carbon economy. While electric, gas, and water networks each have unique environmental risk drivers, the most material environmental risks facing these subsectors are the physical effects of climate change and mitigation policies. Each subsector also faces some land-use risk; as they grow they risk encroaching on habitable or undeveloped lands that are more exposed to biodiversity issues in some parts of the world. Electric and gas utilities are exposed to significant energy transition risks, indirectly, through their upstream partners. These risks to networks are moderated, at least financially, by the regulatory support they enjoy and their ability to absorb costs through rate increases. However, less direct reputational effects can be significant given utilities' strong brand recognition. For electric transmission and distribution networks, the physical effects of climate change, including more frequent and severe wildfires, storms, hurricanes, and tornadoes, have the potential to disrupt the functioning of critical equipment and processes. Battery storage has its own set of environmental risks, stemming from mining and end-of-life disposals of materials used in battery units. For natural gas networks, we focus on gas explosions and leaks that emit highly potent greenhouse gases and may adversely affect local biodiversity, leading to costly penalties and reputational damage. For water networks, environmental risks are mainly water quality and availability, sometimes because of inefficient and aging infrastructure. Both water quality and availability--essential for this sector--can be impaired by climate-related factors, including droughts and floods.

Social exposure

The regulated utility network sector plays a crucial community role by providing essential services that must remain affordable and reliable to ensure conciliatory regulatory and customer relationships. This is the essence of utilities' social license to operate. However, as infrastructure ages, utilities must also ensure safety as leaks, explosions and fires can yield very material financial and reputational consequences. Water utilities may also face public health risks if they are unable to avoid drinking water contamination or stop wastewater from polluting supplies. Governments and regulators focusing increasingly on affordability, which we believe could create barriers to regulated networks' cost recovery. This is especially so in areas facing upward cost pressures from ongoing high investments in renewables and grid strengthening. Longer term, increased costs and improved solar and battery technology could result in some downstream residential, commercial, and industrial customers partially defecting from electric utilities. Utilities also face significant workforce issues. Amid an unrelenting energy transition, electric utilities, specifically, must develop employee bases with appropriate skills to operate the grid of the future, as well as retain employees. Given the sector's high unionization, companies have to focus on labor-relations management to avoid labor disruptions and related costs. Given that utilities are local in nature, they play a prominent role in communities and have large numbers of local employees. This can often result in regulatory support, but also carries a responsibility to contribute to the community and support low-income customers, as well as tactfully mitigating disputes around land use as they expand. Finally, given the social responsibility of providing continuous electricity, gas, and water supply, preventing any risk that could lead to a power blackout or water shortage is an important consideration. Cyber-attacks are therefore increased threats for the sector, more so than in many other sectors.

Regional Risk Summary

United Kingdom

The U.K. benefits from strong corporate governance practices. Brexit-related policy uncertainties still linger, including disagreements with the European Union on the implementation of the Northern Ireland Protocol which may lead to frictions. Still, in our view, UK benefits from robust and independent institutions and high rule-of-law standards, as well as very low actual and perceived levels of corruption. Governance guidelines are primarily based on the U.K. Code of Corporate Governance published by the Financial Reporting Council (FRC) and updated in 2018. The revised and strengthened code provides a broad set of recommendations including executive remuneration and board composition, follows a comply-or-explain model, and is widely regarded as best practice internationally. The recent version strengthened provisions on the role of the audit and nomination committees, chair tenure, and stakeholder engagement. An updated version of the U.K. Stewardship Code published by the FRC also came into effect on Jan. 1, 2020. It sets out principles for investors. Overall levels of corporate disclosure on ESG are strong and the country benefits from a very active institutional investor base, which has been fuelling the demand for better disclosure and corporate engagement. Legislation that took effect in 2019 will also require pension funds to disclose the financial risks they face arising from ESG factors. The U.K. ranks 11 of 180 on Transparency International's 2021 Corruption Perceptions Index.

United States

With robust institutions and rule-of-law standards, the U.S. demonstrates many strong characteristics but lags several other countries with respect to ESG regulations. Governance is characterized by a very stable political system, a strong rule of law, a powerful judiciary, and effective checks and balances. Conditions of doing business are generally very good. The U.S. follows a rules-based approach to corporate governance focused on mandatory compliance with requirements from the major exchanges (NYSE and NASDAQ) as well as legislation. State corporate law is also a key source of corporate governance, particularly Delaware where over half over all U.S. listed companies and close to 70% of Fortune 500 companies are incorporated. Exchanges mandate high standards of corporate governance. The NYSE requires companies listing on its exchange to have boards made up of a majority of independent directors, with separate remuneration and nomination committees. However, formal requirements on ESG reporting are not as established as they are in European countries. While a growing number of companies have an independent chair, the combination of CEO and chair roles is still popular. Remuneration continues to be a contentious point because U.S. executive pay dwarves global pay levels. The U.S. ranks 27 of 180 on Transparency International's 2021 Corruption Perception Index.

Appendix

Related Research

- "The ESG Risk Atlas: Sector And Regional Rationales And Scores," published July 22, 2020
- "Our Updated ESG Risk Atlas And Key Sustainability Factors: A Companion Guide," published July 22, 2020
- "Environmental, Social, And Governance Evaluation: Analytical Approach," published December 15, 2020
- "How We Apply Our ESG Evaluation Analytical Approach: Part 2," published June 17, 2020

This report does not constitute a rating action.