



Natural Gas Offers Dividend Investors a Path to Carbon Neutrality

Key Takeaways

- ▶ We consider it a prudent approach to grow renewable energy while thoughtfully, practically and responsibly managing the transition away from fossil-fuel reliance.
- ▶ Within the traditional energy sector, we emphasize investments in natural gas, as it is the cleanest of the fossil fuels and instrumental in lowering the world's carbon emissions.
- ▶ As actively engaged ESG investors, ClearBridge works with portfolio energy companies to understand their approach to emissions reductions and develop sustainability strategies that include increased disclosures and reporting.

Climate Change is one of the most pressing challenges facing the world today and a key consideration in ESG investing. Renewable energy's rapid growth is critical to reducing CO₂ emissions and meeting long-term climate objectives, but renewable energy still supplies less than 20% of global energy and is roughly 10% of energy consumed in the U.S.¹ Governments, nonprofits and corporations are increasingly pushing more aggressive emissions reductions programs (the UK recently passed a bill for net zero emissions by 2050 and several U.S. states have similar targets), but even with these programs, carbon-intensive energy sources will continue to play a significant role for many years to come.

ClearBridge's approach to integrating ESG considerations into our investment process supports and promotes ESG best practices through active ownership across all sectors. When choosing investments in the energy sector, the ClearBridge Dividend Strategy ESG Portfolios seek to mirror the transition we are seeing in the world: we seek to grow renewable energy while thoughtfully and responsibly managing the transition away from fossil fuels. In practice, this means looking for more renewable energy investments while critically building out our non-renewable exposure.

Within the traditional energy sector, we emphasize investments in natural gas, as it is the cleanest of the fossil fuels and instrumental in lowering the world's carbon emissions. Natural gas generates substantially less air pollution than coal or oil and compared to other fossil fuels releases far less CO₂ on an energy-equivalent basis (Exhibit 1).²

With the advent of energy production from shale, the production and usage of natural gas in the United States has grown dramatically, particularly in the power generation sector (Exhibit 2). Because natural gas emits so much less CO₂ than coal, the growth in natural-gas-fired power generation has materially reduced CO₂ emissions from the power sector in the U.S. (Exhibit 3). This reduction in CO₂ from the power sector has driven a meaningful reduction in overall greenhouse gas emissions (Exhibit 4).

Given the far better emissions profile of natural gas compared to other hydrocarbons, it is clear that natural gas can play a role in reducing emissions as the world transitions to a renewable power future. But gas does have one drawback that competing fossil fuels do not have and that must be tightly managed in order to deliver on its promise of greenhouse gas benefits: fugitive methane. Fugitive methane is natural gas that escapes into the atmosphere somewhere between the well and the burner tip. As a greenhouse gas methane is dozens of times more potent than CO₂ so it is critical that fugitive methane be minimized.

As actively engaged ESG investors, ClearBridge works with portfolio energy infrastructure companies to understand their approach to emissions reductions. The natural-gas-focused energy companies we have chosen to invest in have committed to meaningful guidelines for the minimization of fugitive methane emissions (generally less than 1% of leakage across the entire supply chain). These companies have a strong economic incentive to minimize fugitive emissions, increasing operational efficiency. Our approach to engagements also includes working with portfolio companies on disclosures and on best practices in publishing sustainability reports.

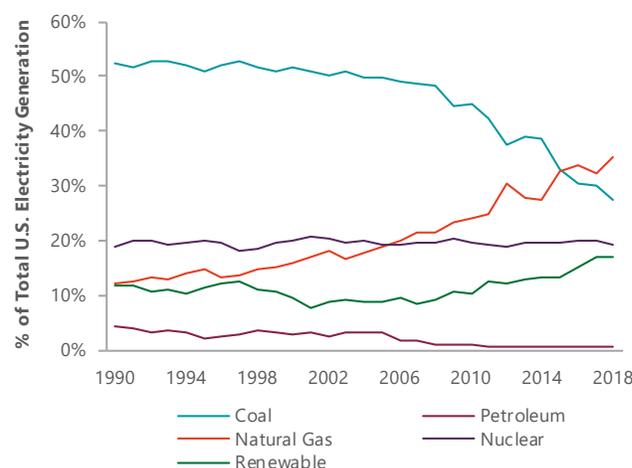
We look forward to a time when the world reaches the point of being net carbon neutral. Unfortunately, even with the most aggressive targets the scale of the challenge dictates that it will take many years to reach that point. Advancing toward that goal will require the use of many different tools: improvements in energy efficiency, increased penetration of renewables, a better mix of hydrocarbons and conservation. While natural gas is not the ultimate solution, it can play a meaningful role in accelerating the change the world needs.

Exhibit 1: Natural Gas Emits Least Carbon of Fuel Options

Fuel	Pounds of CO ₂ per Million BTU	Excess Carbon Emissions Compared to Gas ³
Bituminous Coal	206	76%
Diesel 1	161	38%
Gasoline 1	157	34%
Propane	139	19%
Natural Gas	117	0%

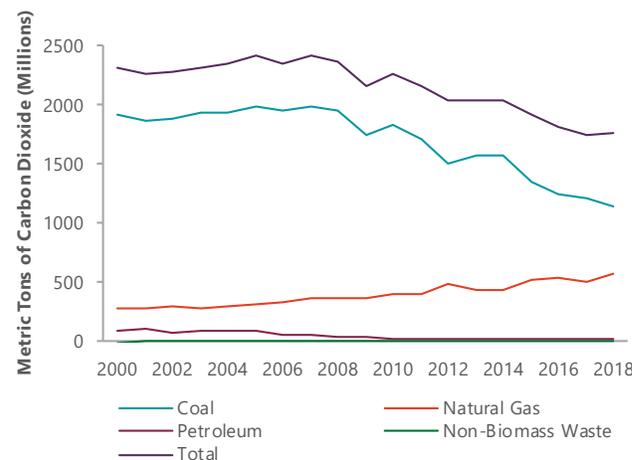
Source: EIA. BTU: British Thermal Unit.

Exhibit 2: Natural Gas Share of Electricity Generation



Source: EIA, Monthly Energy Review. May 29, 2019. Table 7.2a.

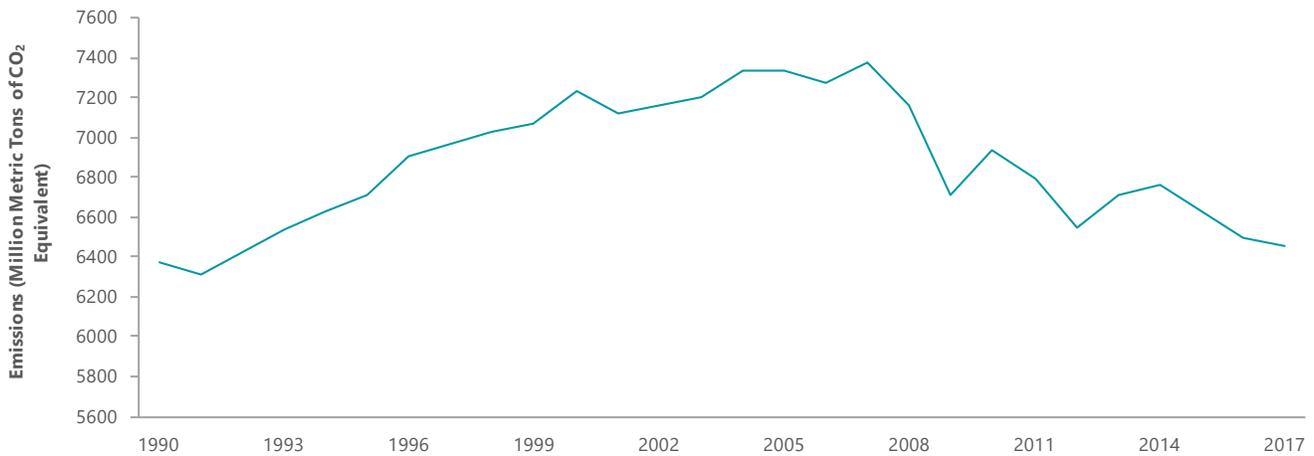
Exhibit 3: U.S. Power Sector Emissions on Decline



Source: EIA, Monthly Energy Review. May 29, 2019. Table 12.6.

1 <https://www.c2es.org/content/renewable-energy/>
 2 https://www.eia.gov/energyexplained/index.php?page=natural_gas_environment
 3 Source: EIA <https://www.eia.gov/tools/faqs/faq.php?id=73&t=11>

Exhibit 4: U.S. Greenhouse Gas Emissions



Source: U.S. EPA's Inventory of Greenhouse Gas Emissions and Sinks: 1990–2017.

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