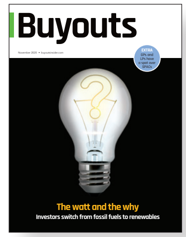


Cover story

The watt and the why

Private equity energy investors embrace the promise but also the challenges of the transition from fossil fuels to the burgeoning renewables movement.

By Kirk Falconer

An energy transition that is poised to sweep the global economy is also reshaping energy private equity – with the help of limited partners looking to go green.

Energy systems are undergoing a shift that will fundamentally alter the way we fuel our vehicles, heat our homes and power our industries. Sparked by concern about the climate impacts of greenhouse gases, especially CO2 emissions, spending on renewable power – above all solar and wind – has ramped up.

Over 2010-19, investment in renewable capacity totaled $2.7 trillion, according to BloombergNEF data, while renewables' share of the energy mix more

"[CPPIB] intends to keep up this volume and continue evaluating opportunities in new types of renewable energy, such as storage, as they're commercialized"

BRUCE HOGG
CPPIB

than doubled. These trends are expected to accelerate. Goldman Sachs in June forecast that renewable generation will be the largest area of energy spending in 2021, surpassing oil and gas for the first time in history.

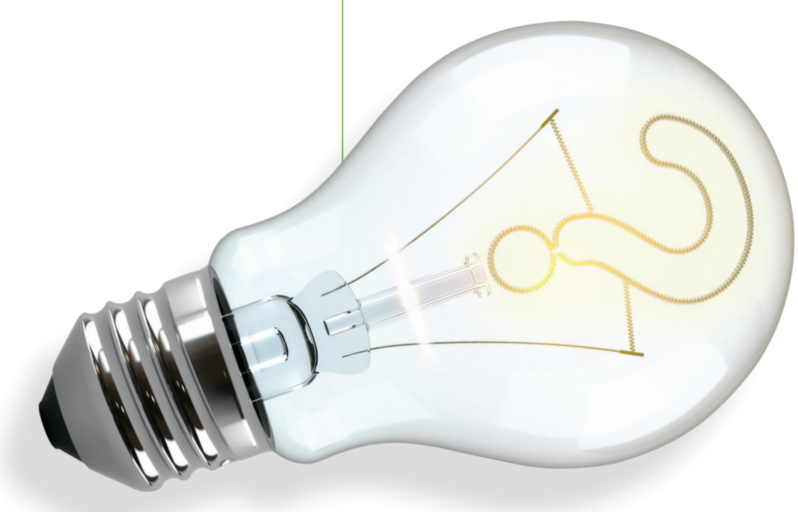
In another sign of the times, solar and wind producer NextEra Energy recently topped ExxonMobil as the most valuable US energy company.

Meanwhile, fossil fuels, which continue to supply about 80 percent of all energy consumption, are not going away any time soon. In fact, natural gas is viewed by many industry analysts as an important "bridge" to a low-carbon future.

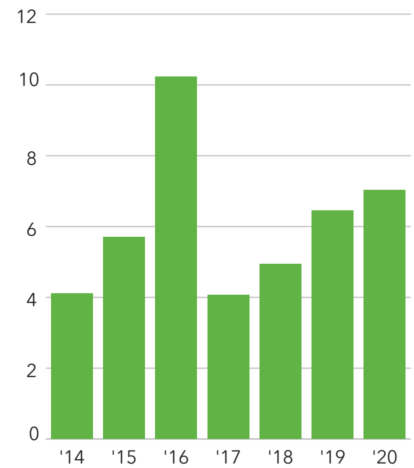
LPs have joined this debate with fervor. Many are rethinking their energy investing, often as part of newly implemented environmental, social and governance criteria. This has led to major adjustments in allocation policies.

"We're seeing an LP interest in renewables displacing a focus on oil and gas," Brent Burnett, co-head of real assets at Hamilton Lane, tells *Buyouts*. "It was not uncommon in the past for a large institution's natural resources allocation to be 50-70 percent upstream investments. That is shifting to renewable investments, in part because it's an area with secular growth behind it."

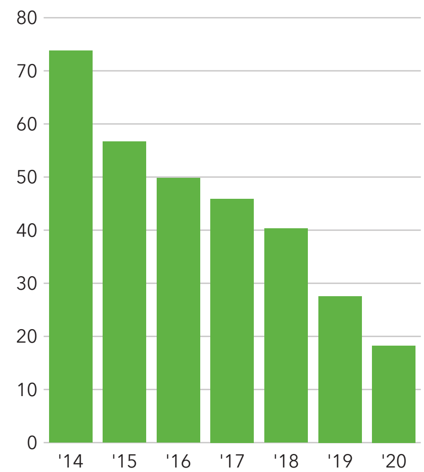
This is borne out in LP surveys. A 2019 Coller Capital poll found 40 percent of institutions saying they plan to reduce their oil and gas allocations over the next five years. Roughly the same percentage said they would expand climate-friendly



Global renewable capital raised ($bn)



Global oil & gas capital raised ($bn)



Source: PEI

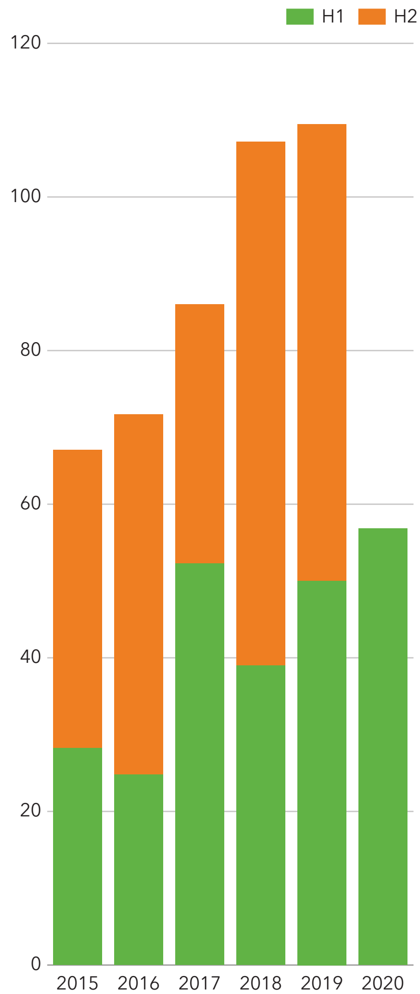
activity and give more emphasis to renewable power.

High-profile institutions are reinforcing this message in a series of climate-related initiatives.

Last year, several pension plans and insurers formed the Net-Zero Asset Owner Alliance to battle climate change by pledging to carbon-neutral investment portfolios by 2050. The group in August had 29 members, including Allianz, Caisse de dépôt et placement du Québec, Caisse des Dépôts, California Public Employees' Retirement System and Zurich Insurance.

Canada Pension Plan Investment Board, the world's largest investor in PE, has also made climate change a priority.

Infrastructure global fundraising ($bn) 2015-20



Source: PEI

It promised in 2019 to weigh every significant transaction according to climate risks and opportunities, and to boost deployments to renewables.

CPPIB is making progress. In two and a half years, it grew renewable holdings to $6.6 billion, Bruce Hogg, head of power and renewables, says. Contributing to this was the 2020 purchase of Pattern Energy, done in a $6.1 billion deal with Riverstone Holdings, which created the solar and wind business in 2009.

CPPIB intends "to keep up this volume," Hogg says, "and continue evaluating opportunities in new types of renewable energy, such as storage, as they're commercialized."

The plan is to back assets and platforms through joint ventures with aligned partners, typically with CPPIB taking the lead.

Oil and gas: down but not out

As LPs go green, they are, through the fundraising market, influencing a redirection of energy PE.

Oil and gas-focused fundraising has been in decline since 2014, *PEI* data show. Global fundraising in 2019 was the slowest in more than a decade, with 39 vehicles bringing in $28 billion, at some distance from the $74 billion collected five years earlier.

The first half of 2020 saw something of a rebound, as $18 billion went to 21 oil and gas offerings. Most H1 commitments, however, were captured not by the market's traditional beneficiaries, upstream funds (investors in exploration and development), but by funds with a full or partial midstream focus (investors in infrastructure) – such as ArcLight Capital Partners, Energy Capital Partners and Tailwater Capital – a strategy that remains in favor.

The fortunes of oil and gas PE firms are tied to a sector facing major headwinds. There is a glut in supply, exacerbated by recent geopolitical price wars. The health crisis added to troubles by eroding fuel demand and disrupting producers, some of which are going bankrupt. The casualties include Chesapeake Energy, a formerly PE-backed pioneer of the US shale revolution.

"Commodity price exposure is today generating more volatility and wreaking havoc on energy PE funds," Mark Florian, head of global energy and power at BlackRock, says. Florian, an executive with energy PE giant First Reserve before joining BlackRock in 2017, adds "this is making it tougher to raise new capital."

Jeff Eaton, a partner with Stifel's Eaton Partners, agrees, noting upstream funds are bearing the brunt due to limited paybacks on substantial amounts of committed capital.

"Returns from upstream oil and gas have been quite poor going back nearly a decade," Eaton says. "Investors are

"We're seeing an LP interest in renewables displacing a focus on oil and gas"

BRENT BURNETT
Hamilton Lane

fatigued, as they see no real proof the strategy is succeeding and are unwilling to believe that things will improve. The result is the most challenging fundraising market we've ever seen."

Increasingly, ESG policies are also driving LP decisions about commitments. "We're hearing more about ESG eliminating allocations to oil and gas," Eaton adds, "especially as political pressure builds on pension systems, university endowments and other institutions."

Opportunity in a time of crisis

With fewer LP dollars available for fundraising, the universe of traditional energy PE firms – which greatly expanded in the past 10 years – is expected to consolidate. Hamilton Lane's Burnett says this "is already happening."

A smaller base of top performing managers and strategies will, however, persevere. Funds specializing in midstream infrastructure assets, such as energy processing, storing, transporting and marketing, are still attractive, Burnett says. In addition, many LPs are under-allocated to midstream.

Upstream funds with dry powder will be able to pursue E&P deals in a less competitive space. Eventually, their activity should benefit from improved prices. Funds with solid track records, Eaton says, are also likely to find LPs to replenish pools, among them "contrarian investors like family offices, hedge funds and wealthy individuals."

A near-term opportunity set includes the dislocation affecting E&P, oilfield services and other energy companies since the outbreak of the covid-19 pandemic. This takes in everything from depressed asset values to distressed debt and restructurings, Eaton says.

Baran Tekkora, Riverstone's co-head of private equity, sees a potential value proposition. "There is a fair amount of high-quality companies out there with assets that are under-valued," he says. "In a market with both cyclical and structural elements, our focus will be on businesses that can generate stable, long-term cash-flow."

> *"There really aren't that many pure-play renewable PE managers"*
>
> **DOUG KIMMELMAN**
> **Energy Capital**

Private debt is also "a huge opportunity," Christopher Abbate, co-head of Riverstone Credit Partners, says. "A pullback by banks unwilling to put more money into the oil and gas industry is creating room for replacement capital, for investment across a range of credit assets."

Spiking insolvencies and bankruptcies will provide dealflow to a handful of funds with turnaround capabilities. Mountain Capital, launched by former Apollo Global Management executive Sam Oh, is an example. So too is Waterous Energy Fund, led by ex-investment banker Adam Waterous and KKR principals.

Riverstone, a 20-year veteran of energy investing, illustrates an additional approach relevant to a changing mix of challenges and opportunities – diversification. It operates with cross-spectrum energy platforms. This includes investing across the oil and gas value chain – from upstream to midstream – as well as credit, renewable power and infrastructure, and in select geographies (Latin America). Diversified activity allows the firm to anticipate shifts in energy and adjust as needed, Alfredo Marti, co-head of Riverstone Power, says.

"Optionality is central to Riverstone's strategy," Marti says. Going forward, he adds, renewables will be "a bigger part of the pie."

Lime Rock Partners, founded in 1998, also has a diversified strategy. Securing $1.4 billion two years ago for its upstream platform, Lime Rock is seeking a combined $1.35 billion for a fifth oil and gas properties acquisition vehicle and a debut renewable fund, Buyouts reported last year.

Renewable power: The next wave

In contrast with oil and gas, renewable-focused fundraising is surging thanks to fresh capital inflows.

Rising LP demand for renewables has helped spur infrastructure fundraising. Global activity has expanded since 2014, *PEI* data show, with 85 pools last year collecting $109 billion. In this year's first

$2.7trn

Investment in renewable capacity from 2010 to 2019, according to BloombergNEF

$6.6bn

CPPIB's holdings in renewables

40%

Percentage of institutions saying they plan to reduce their oil and gas allocations over the next five years, according to a 2019 Coller Capital survey of LPs

half, 39 infrastructure funds accounted for $57 billion, led by the $20 billion close of Brookfield Asset Management's Fund IV.

The first half's second-largest closing was BlackRock's third infrastructure offering, earmarked for investments in the power (including electric power generated by renewable sources), midstream and utility sectors. It wrapped up at $5.1 billion, ahead of a $3.5 billion target, owing to "a real focus on energy transition among LPs," Florian says.

Renewable power is infrastructure's fastest-growing sub-set, Burnett says. Over the past five years, Hamilton Lane has observed renewables' share of diverse fund strategies increase to a range of 25 percent to 30 percent, from 10 percent to 15 percent.

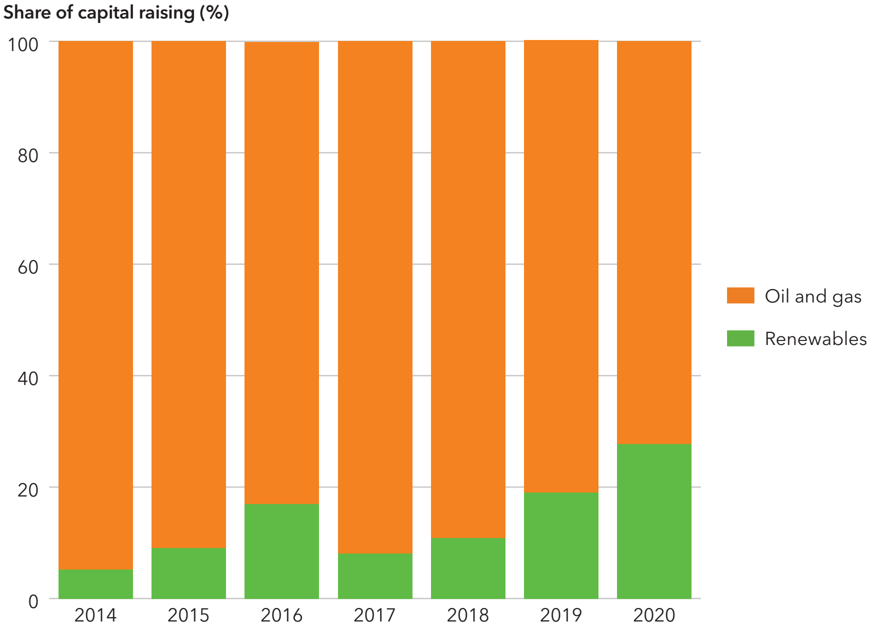
Fundraising by renewable PE vehicles, though smaller in scope, is also on the upswing. Worldwide, 30 funds brought in more than $6 billion in 2019, the highest amount in three years. This year will see a more substantial haul, with $7 billion already going to 18 pools at the end of June.

Renewable funds are evolving with a vast and still nascent industry. At the forefront are solar photovoltaic and concentrating systems, as well as offshore and onshore wind turbines, which emerged strongly in recent years and are now cost-competitive as a supply source to electricity consumers.

"Commodity price exposure is today generating more volatility and wreaking havoc on energy PE funds"

MARK FLORIAN
BlackRock

Share of capital raising (%)



Source: PEI

Other renewables are also making gains. They include bioenergy created from organic materials, such as waste, and geothermal energy, or heat that is produced below the Earth's surface. There is also hydropower, the largest source of renewable electricity generation, according to the International Energy Agency.

Renewable funds are, broadly speaking, of two basic types. The first, a favorite of core infrastructure strategies, gives priority to acquiring fully developed, fully contracted assets and owning them for the long term.

The second emphasizes development and growth. Marti says this is where a value-adding investor can "solve the most difficult problems the renewable industry is facing." Riverstone has to date secured $5 billion-plus for its strategy, including $1.4 billion this year for two new pools.

A key difference between the two approaches, Burnett says, is performance. While long-hold, contracted assets are an attractive, low-volatility source of cash flow, returns have been slipping due to large influxes of capital. If LPs "want an alpha," he says, they might best look on the development side.

One of the best examples of a development-stage investment opportunity, Florian says, is grid infrastructure – and especially storage. "Until we can find new ways of doing storage, it will be challenging to make a full transition to cleaner, affordable and reliable energy systems," he says. "It will take decades. It's not a flip of the switch."

Doug Kimmelman, senior partner at Energy Capital, agrees, noting battery storage will be crucial to addressing the "unreliability of solar and wind power supply." Technology solutions that eventually result in a breakthrough in batteries, he says, are likely to prompt "the next leg of growth."

Energy Capital, which in 2020 raised $6.8 billion for a fourth fund, is focused

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>
> **JEFF EATON**
> **Eaton Partners**

on acquiring, building and scaling power generation, renewable, midstream and environmental infrastructure assets and platforms. It is best-known for its investment is Calpine, a top generator of electricity from natural gas and geothermal resources.

Over its 15-year history, Energy Capital provides evidence of the return potential of a growth strategy with a strong renewable component. Since inception, the firm has earned a gross internal rate of return north of 20 percent, a person with knowledge of the matter tells Buyouts.

Obstacles

While the fundraising market is expected to see boosted LP interest in renewable offerings, it is not clear demand will always be met with supply.

Fundraising trends suggest there are enough infrastructure vehicles to absorb their share of any ensuing flood of capital. Despite the size of the opportunity set, however, LPs could be harder pressed to find dedicated PE funds.

The reason for this, Kimmelman says, is "there really aren't that many pure-play renewable PE managers."

This is a concern, as PE firms are key drivers of development and growth strategies. Some recent entrants are long-time oil and gas investors that have assembled teams combining investment professionals with renewable operators. The launch last year of EnCap Investments' platform included the hire of four executives from storage specialist Prisma Energy.

Pitfalls exist for LPs scoping out renewable fund options for the first time, Eaton says. Many LPs are still determining their allocation policies and risk-reward objectives, with a mind toward "the best way to play it in a big and broad market."

In vetting what is likely to be an increasing number of fund pitches, he says, LPs must be selective.

Eaton sees incumbents in renewable PE investing as having the advantage over newbies, such as oil and gas firms looking to adapt. "Incumbents have the skill sets, they know what's coming, and they have relationships with LPs," he says. In the near-term, emerging managers with inaugural funds may encounter challenges, including those imposed by the health crisis.

Green day on the horizon

CPPIB's Hogg expects the impact of an energy transition on private equity to be "evolutionary, not revolutionary." For the foreseeable future, he says, there will be a continued global economic need for investments in both fossil fuel-based generation and renewables.

BlackRock's Florian agrees, saying the long-term path to a sustainable, low-carbon future is "like turning a massive aircraft carrier around." It will require "large, comprehensive efforts," he adds.

Florian's point is reinforced in Goldman Sachs' June forecast, which estimated the move to renewable power will create an investment opportunity as big as $16 trillion by 2030. An impetus for this activity, Florian says, will be on-going public expressions of concern about the effects of climate change – and the legislative response of public policy makers.

A potential new US Administration in November, promising $2 trillion in spending on clean energy projects and infrastructure, would be a major shot in the arm, Lauren Anderson and Eli Katz, partners with Latham & Watkins, say. It might contribute to "a once-in-generation trend toward decarbonization."

Higher levels of government spending may also help leverage a greater renewable focus in fundraising, Anderson and Katz add, increasing options for LPs.

Within the PE community, another decisive factor will be further shifts in LP perspectives and policies. More widespread adoption of ESG criteria is a part of this, as are enhanced LP expectations about the application of ESG in PE operations and portfolios.

This will include oil and gas managers, Hamilton Lane's Burnett says, which "must be ready with a plan demonstrating how they'll reduce their environmental footprint when they come back to market." ■