

Transformational M&A: energy transition investments



Energy transition investments in brief

This paper explores the role of mergers and acquisitions (M&A) and, to a lesser extent, joint ventures (JVs) in facilitating the energy transition. Specifically, how M&A can enable companies to transform themselves over short spaces of time into lower-carbon enterprises. Our analysis is set within the evolving global landscape of M&A and considers the opportunities and risks to companies of using acquisitions and divestments to drive transition. The key trends in M&A are examined from a transition angle, with regional perspectives offered from MENA, Europe, the US and Asia-Pacific.

M&A present a unique and transformative opportunity for companies to accelerate sustainability journeys. However, M&A may entail companies entering into new sectors, geographies or nascent technologies, or adopting new capital strategies, each of which presents distinct challenges and complexities, both commercial and legal.

Whether the inorganic M&A process is through vertical or horizontal integration, the acquisition or creation of new asset portfolios, or M&A into emerging technologies, transformational M&A present a specific, and sometimes acute, set of legal risks. These risks must be carefully evaluated, understood and, to the extent possible, mitigated to deliver successful business strategies.

This report at a glance

For in-house legal teams keen to understand what actions they need to take, key takeaways from the range of strategic, commercial and legal issues in M&A covered in this paper are summarised below.

Key legal takeaways on decarbonising through M&A

Pre-transaction legal diligence and protections

- Undertake full risk analysis of present and future legal/ ESG liability posed by owning, controlling or operating the assets.
- Ensure early review of integration challenges, possible synergies and required operational and governance structures.
- Complete a detailed investigation of subsidies and incentives to support commerciality of business, as well as risks posed by protectionist or ‘level playing field’ regulations.
- Put in place protections to insulate against downside risk, including contractual warranties and indemnities, price adjustments and structuring to take advantage of bilateral and multilateral treaties.

Contractual framework inclusions/ structuring for future M&A and non-core spin-offs

- Design the contractual framework as segmented projects with separate profit centres.
- Include drag and tag rights, rights of first offer/refusal and/or lock-in periods.
- Financing documents to contain off-ramps, carry or other structured funding arrangements in case of issues with equity funding.

Mechanisms to consider for responsible exit

- Include an earn-out clause linked to future environmental performance of the asset.
- Contractually oblige the buyer to limit future emissions or retire asset within specific timeframe.
- Select a buyer with a clear transition agenda or who wishes to repurpose.
- Secure future information access rights on exit.

Key regulatory themes on decarbonising through M&A

- Energy transition M&A is sensitive to public policy, legislative incentives and tax policy, as well as climate change regulation and disclosure requirements.
- A focus of rules on ‘good governance’ and ‘do no significant harm’ is leading to increased scrutiny from potential future purchasers and the wider stakeholder community.
- Competition authorities are providing tailored guidance to help businesses that are cooperating with competitors to pursue their sustainability goals while staying on the right side of antitrust laws – tangible environmental-related benefits may be considered in individual cases to offset harms to competition.
- An overarching M&A-related concern is whether foreign subsidies could give rise to undue competitive advantages in domestic markets.
- For financial investors, aligning a project or business with the complex sustainable finance regimes can potentially add real value (for example, in the EU, ensuring it is taxonomy-aligned or meets an impact fund’s SFDR Art. 9 criteria).

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SECTION ONE

Supporting transformation: the case for M&A

AT A GLANCE

M&A can provide rapid benefits including new IP, innovation capabilities and essential inputs and markets for green transition. Public policy may prompt the running down or closure of divested high-carbon assets, although sellers can try to ensure buyers continue a transition trajectory.

Rapid emissions reduction requires a step-change mindset. Finding new ways of living and working will need substantial investment, including upgrading existing businesses and developing new assets. M&A may not be a panacea, but transactions can support transformation more quickly and decisively than incremental improvement.

Acquisitions can confer an immediate innovation advantage, while disposals can limit liabilities and asset stranding. M&A can diversify a company's business away from legacy interests, provide access to new IP and innovation capabilities and, when vertically integrated, secure essential inputs and markets for green transition.

In addition, M&A can help break out of the 'incumbent trap' (complacency resulting from the apparent success of a legacy business model), allow companies to leapfrog challenging and typically time-intensive transition journeys, and gain access to sustainable brands, says Jake Reynolds, Freshfields Head of Client Sustainability and Environment. 'M&A also provides a way to monetise investment in low-carbon IP, SMEs and other enterprises. Without M&A as an exit strategy there is significant risk of no investment in the first place.'

'Clearly, the sale of high-carbon assets to buyers with no interest in decarbonisation will not deliver emissions reduction in itself,' Reynolds explains. 'The emissions will merely be placed under the new ownership of companies not necessarily minded to reduce them.'

Nevertheless, if a large-scale disposal of carbon-intensive assets occurs as a consequence of carbon-linked regulation, taxation or simply increased customer demand for low-carbon goods and services (including energy, mobility, chemicals, and commodities) then the value of such assets can be expected to fall.

Sensitive deal flow for transition

In other words, the economics of climate transition may prompt the running down and potential closure of high-carbon assets anyway, provided political commitment to mitigating global warming is maintained, Reynolds adds. 'In that sense, deal flow for transition will be sensitive to public policy on climate change for years to come.'

We have also seen sellers of carbon intensive assets take a variety of approaches to try to ensure that buyers continue on a transition trajectory by, for example:

- selecting buyers that may have technical advantages or clear transition agendas and strategies that should translate to an improved post-sale asset operational emissions profile (in some cases, specific buyers may also be the natural custodians of assets that can be repurposed for transition activities eg converting gas pipelines to carbon dioxide pipelines or using depleted reservoirs as future CCS facilities);
- agreeing contractual arrangements with a buyer to retire the asset at a defined point in the future, or otherwise limit its future emissions;
- agreeing an earn-out clause linked to effective environmental performance of the asset; and
- seeking to further manage potential 'legacy risk', particularly if assets are leaving the public company domain to be held by private funds, by securing future information access rights on exit and potentially embedding ESG considerations in constitutional documents.

SECTION TWO

Key transition M&A trends to watch

The M&A landscape is changing rapidly, influenced by the challenges and opportunities of the energy transition. We examine ten of the key trends with case studies to illustrate.

01. Increased vertical and horizontal integration

Key insight

Potential ramifications of government subsidies and incentives granted to a target require detailed investigation.

The trend to integration is especially noticeable in both traditional hydrocarbon players moving into low-carbon energy, and OEMs moving upstream to secure supply of key transition metals and products.

‘A key driver for integrated M&A activity is a need for companies to alter their long-term trajectories, and established business models, to enable decarbonisation,’ explains [Philip Morgan](#), Freshfields Partner and head of the firm’s energy and natural resources practice in Asia. ‘The European traditional oil and gas supermajors – bp, Shell, and TotalEnergies – have embarked on an expansive form of horizontal integration within the energy sector in a quest to become diversified net-zero energy companies.’

Diversification on this scale would be almost impossible solely through organic investment. M&A has been, and will continue to be, a key part of these companies’ routes to net zero.

Yet M&A as a means of developing new business lines can be extremely challenging, Morgan warns. ‘Overpaying or acquiring a flawed asset portfolio will undermine investor confidence and damage share prices. Aside from clear financial modelling, rigorous diligence on all aspects of the target business, combined with an early review of integration challenges and possible synergies, will be critical.’

If a deal is struck, a buyer should be aware that this may be a new and emerging sector, both for the buyer’s management and objectively, Morgan advises. ‘The full matrix of possible buyer protections will need to be explored to insulate against downside risk, not just financial (price adjustments) and contractual protections, but also available bilateral and multi-lateral investment treaty protections.’

Understanding the current and anticipated future support for the relevant asset and sector at the governmental and regulatory level is crucial. The potential global ramifications for a buyer’s business of government subsidies and incentives granted to a target increasingly require detailed investigation: a number of jurisdictions have in recent years introduced protectionist or ‘level playing field’ measures, such as the EU’s Foreign Subsidies Regulation in a number of jurisdictions in recent years.



A key driver for integrated M&A activity is a need for companies to alter their long-term trajectories, and established business models, to enable decarbonisation.

CASE STUDY

bp / Archaea Energy

In late 2022, Freshfields advised bp on acquiring a leading producer of renewable natural gas (RNG) in the US, Archaea Energy, for US\$3.3bn. Archaea operates 50 RNG and landfill-to-energy facilities across the US, with a development pipeline which could support around a 500 per cent increase in RNG volumes by 2030.

[In bp's own words](#), acquiring Archaea 'will expand bp's presence in the US biogas industry, enhancing its ability to support customer decarbonization goals and also progressing its aim to reduce the average carbon intensity of the energy products it sells'. bp also noted that its shareholders should 'expect additional distinctive value through integration with bp's trading capabilities and global customer relationships.'

bp's statements make clear that this acquisition was envisaged as opening doors, not just for immediate decarbonisation opportunities, but for value creation in other business units and for the potential to deploy new or enhanced RNG capabilities both in the US and globally. .

Established industries have made new and dramatic moves towards vertical integration.

Further integration has been a feature of the transition business landscape for several years (think automotive OEMs such as Tesla entering into supply contracts directly with mines). But we are now seeing companies throughout the value chain making direct acquisitions and investments into upstream and downstream businesses. For example, in early 2023, General Motors announced that it would make a \$650m equity investment directly into the miner Lithium Americas to secure future access to lithium.

Similar steps have been taken, or are being taken, by OEMs such as Ford and Volkswagen to increase certainty of supply of key EV battery components.

In the chemicals industry, we have previously seen BASF acquire a significant direct stake in the 1.5GW Hollandse Kust Zuid 1-4 offshore wind farm, one of the world's largest. Nearly half of the electricity from this project will be used to reduce the carbon footprint of products from a number of BASF's sites across Europe.

Similarly, creative steps towards vertical integration are being seen in the nascent hydrogen industry, as companies with various outputs, from fertiliser to aluminium, look to secure a key green input that can

decarbonise their product offering and secure their future market positioning – both from a reputational and a regulatory perspective.

As with expansive horizontal integration in industries, vertical integration M&A on this level, into new and developing sectors, carries significant risk and complexity.

Buyers must ensure they have the right sector-specific commercial, technical and legal capabilities to carry out the transaction and mitigate exposures, and this may not be available in-house.

Validating key assumptions surrounding the vertical driver for the transaction and, as far as possible, contractually future proofing the vertical benefit, must be threshold objectives of the buyer's deal team.

Yet the potentially huge commercial benefits of such transformational investments will still need to be carefully balanced against increased risks, both commercial and legal, says [Chapman](#). 'Buyers will likely be less well-attuned to the new sectors and markets they are investing in and the potential headwinds they may face in the coming years.'

In some cases, buyers will also have little alternative but to develop and operate assets with unfamiliar JV partners with divergent agendas, business models and funding requirements, all of which need to be carefully considered.

‘Owning, controlling or operating (or appearing to operate) such assets may also pose direct legal liabilities (particularly around poor ESG performance),’ says Chapman. ‘These legal risks can be managed to some extent through appropriate governance, but the nature of these often-novel legal risks will first need to be clearly understood.’

In the face of this complexity, taking a holistic and multi-disciplinary approach to risk identification and mitigation may be the difference between a transformational and unsuccessful acquisition.

CASE STUDY

IONWAY, a Umicore / VW JV

This deal to establish the first large-scale supply chain for sustainable batteries for electric vehicles in Europe is representative of efforts to establish closed-loop, vertically integrated battery materials value chains in key regions.

In September 2022, Umicore created a joint venture with PowerCo (Volkswagen’s battery subsidiary) to establish the first large-scale integrated supply chain for sustainable batteries for electric vehicles in Europe. The partnership involved approximately €3bn in investment and included production of cathode materials required for Volkswagen’s European cell factories and their precursors as well as collaboration on the sourcing and processing of metal raw materials.

The deal is the first of its kind in Europe, focusing on the technology and know-how to produce precursor and cathode materials at large scale in Europe, a strategically important resource for EV batteries. Production will start in 2026, with the aim of reaching annual production capacity of 160GWh in 2030, or the equivalent of 2.2m fully electric vehicles. At the same time, the partnership will focus on setting up a sustainable, transparent supply chain with high environmental and social standards.



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CASE STUDY

BASF / Harbour Energy

BASF’s JV with LetterOne is consistent with another emerging global M&A theme that has been particularly evident in Europe over the last five-to-ten years: diversified energy and resources companies taking a rapid route to decarbonisation by selling full portfolios of oil and gas assets.

In December 2023, BASF and LetterOne, as shareholder of Wintershall Dea, announced a business combination agreement to transfer to Harbour Energy plc Wintershall Dea’s E&P business, consisting of producing and development assets, as well as exploration rights, in a number of countries across Europe, North Africa and the Americas.

The agreed enterprise value of the Wintershall Dea assets was \$11.2bn. This transaction is consistent with another M&A theme we have seen emerging globally, but particularly in Europe over the last 5-10 years, with diversified energy and resources companies taking a rapid route to decarbonisation by selling full portfolios of oil & gas assets.

As stated by Dr Dirk Elvermann, Chief Financial Officer of BASF, ‘In addition to the cash component, the shares in Harbour that BASF will receive upon completion of the transaction offer significant potential for value creation and allow for a gradual and optimised exit from the oil and gas business over the next few years.’

02. Bundling small projects from SME developers into portfolios to create scale

Key insight

Striking the right balance between development and generating assets in a renewables portfolio is very important.

As with any other nascent industrial sector, in recent years we have also seen project developers grappling with the question of how to monetise the new asset classes they are developing.

With renewables projects in particular, project sizes in many parts of the world, including emerging regions such as Southeast Asia, have historically been small. The more successful project sponsors have sought to construct portfolios of assets, which combine cash-flow generative, power producing assets with a clear and committed development pipeline and a robust management and operational team. Portfolio or platform creation has allowed developers in many cases to raise further equity funding and green finance in various forms to support the development of their businesses.

Critically, from an M&A perspective, this has also facilitated the creation of companies of sufficient scale to attract material interest as acquisition targets from a range of strategics, private capital investors, and pension and other institutional funds.

This has led to a number of hotly contested auction processes globally in recent years, such as the \$1.55bn Sprng Energy sale (ultimately to Shell) in India and the \$605m sale of Nexif Energy to Ratch Group in Southeast Asia, which completed in early 2023.

A clear geographic strategy will often be important for the creation of a successful renewables portfolio for an M&A exit, says [Morgan](#). 'Platform sponsors will need to determine at an early stage whether they will be geographically diversified or focused on particular countries, regions or market types, for example, developed versus developing economies.'

A platform may focus on a single jurisdiction in countries such as India or the US where the domestic opportunity is huge. Or it could be more regional but thematic, as in developed economies in the Asia-Pacific region.



Platform sponsors will need to determine at an early stage whether they will be geographically diversified or focused on particular countries, regions or market types, for example developed versus developing economies.

This approach may afford opportunities to reach scale domestically on an accelerated basis and allow for a narrower management focus.

More globally diversified portfolios will have the advantage of greater insulation from regulatory or market change in particular jurisdictions and may be able to draw on global best practices as a differentiator in developing markets, Morgan says.

'Irrespective of the approach taken, developing a coherent business philosophy and strategy for the portfolio's geographic growth, which is aligned with the emerging operational and regulatory landscape, will be critical when presenting a compelling target business to potential acquirors.'

As noted above, striking the right balance between development and generating assets in a renewables portfolio is very important. Producing assets demonstrate the management team's capabilities and provide cash flow for debt repayments and to fund the development pipeline.

Whilst portfolio building has been a clear feature of the renewables industry, and one which has assisted in its growth to date, it remains to be seen whether portfolios will be replicated in other emerging, decarbonising industries such as biogas or battery energy storage systems (BESS), where scale and scalability remains uncertain in the short- to medium-term.

At present, and in a bid to reduce unit production costs to an economically viable level, most hydrogen projects are being conceived on a scale that would not lend itself well to portfolio creation, says [Chapman](#). 'But this could change as the cost of key technologies reduces and technologies become easier and cheaper to deploy on a smaller scale and using more modular technology, as we have seen to some extent in recent years with LNG regasification.'

03. Traditional players moving outside of their comfort zones

Key insight

M&A and JVs allow for a much speedier move into markets where one partner or target has access to and knowledge of a particular territory or has finessed a particular business line.

The energy transition brings novelty: a fundamentally different way of doing business using new tools, assets and ways of thinking.

In some cases, this will involve adapting an existing technical skill set and acumen into new markets, says [Chapman](#), a Freshfields Partner advising on the energy transition. 'For example, the international energy

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M&A and JVs allow for a much speedier move into markets where one partner or target has access to and knowledge of a particular territory or has finessed a particular business line, says [Morgan](#).

'The same logic applies where technology or intellectual property is key to a particular decarbonisation pathway,' Morgan explains. 'M&A can enable a company to deploy its business strategy more effectively with a variety of integrated IP in its market offerings.'

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04. New technology providers and specialist operators entering projects earlier

Key insight

Parties should anticipate the path to final investment decision and project commissioning, ensuring appropriate off-ramps.

M&A during the early stages of a venture – whether at the individual project level or at the corporate level – enables smaller and/or more niche market participants to have a magnified impact, says [Morgan](#).

‘Co-venturers can leverage the technical capabilities of one partner to deliver a much more effective outcome than would be possible for either of them individually, and M&A which supports increased vertical integration enables these smaller entities to be involved across the value chain at an earlier point in a project or business lifecycle, with greater impact.’



Co-venturers can leverage the technical capabilities of one partner to deliver a much more effective outcome than would be possible for either of them individually.

CASE STUDY

Occidental / Carbon Engineering

In August 2023, Occidental (Oxy) announced it had entered into an agreement to acquire Carbon Engineering, the leading direct air capture (DAC) solutions provider, for \$1.1bn.

Oxy has announced ambitious plans to build 100 DAC plants by 2035 and this deal will cement its position as the leading supplier of DAC carbon removal offsets.

[As Vicki Hollub, Oxy's President, explained](#), ‘We expect the acquisition of Carbon Engineering to deliver our shareholders value through an improved drive for technology innovation and accelerated DAC cost reductions. This technology partnership also adds new revenue streams in the form of technology licensing and royalties. Importantly, the acquisition enables Occidental to catalyse broader development partnerships for DAC deployment in the most capital efficient and valuable way.’

Where specialist operators and/or technology providers have partnered with major industry players or project developers, each party will need to carefully anticipate the path towards FID (final investment decision) and project commissioning and ensure that there are appropriate off-ramps at the right time (or potentially carry or other structured funding arrangements in place) if the equity funding requirements of the project are likely to exceed the capabilities of any of its participants. (Our [recent post on considerations for ‘green hydrogen’ projects](#) includes some of our insights on JV/M&A activity in the low-carbon hydrogen sector.)

05. Geography is critical for many low-carbon technologies

Key insight

M&A in new jurisdictions or sub-sectors needs robust diligence, appropriate deal structuring and contractual protections. Allocate more time to scenario planning and contingent downside risk evaluation.

The commitment by more than 100 countries at COP28 to triple renewable energy capacity by 2030 to at least 11,000 GW will require a colossal funding effort from governments and investors alike, potentially \$12tn of investment in the power system up until 2030 – [an average of \\$2tn per year starting in 2024](#).

Increasing renewable energy capacity will also require an unblocking of logistical, inter-connection, supply chain, resource and regulatory bottlenecks which have already led to the abandonment of a number of material new development projects globally, says [Chapman](#).

An increased proportion of renewables in the primary energy mix is clearly a core component of global efforts to decarbonise.

‘One inevitable global trend, both as a feature of the project development and M&A landscape for renewables – and with that, green hydrogen production – is that project sponsors are looking to invest in, and to acquire assets in, jurisdictions with the highest availability of the required climatic conditions for electricity generation,’ Chapman explains. ‘These are not necessarily countries with proximity to growing electricity demand.’

Countries and areas, such as Western Australia or Oman, which have both high availability of sunlight (during the day) and significant wind (typically at night), have been a key focus of green hydrogen developers, even though they are some distance from major population centres.

The same applies for geothermal and hydropower.

The fact that green hydrogen appears to be capable of ship-bound transfer using a number of possible vectors makes this distance less of a boundary than it would be for renewables that solely produce green electricity for the relevant grid. Thus, there is increased focus on investment in more remote and unfamiliar, potentially emerging market, jurisdictions.

For carbon sequestration, conditions below the Earth’s surface, as opposed to above it, are what matters. At this stage, carbon storage developers need the right geology, typically either depleted hydrocarbon reservoirs or deep saline aquifers, in which to store carbon dioxide.

Such geological structures may not be located near to end power or industrial emitters and carbon dioxide may need to be transported considerable distances, potentially cross-border, by pipeline or by ship, for sequestration.



Project sponsors are looking to invest in, and to acquire assets in, jurisdictions with the highest availability of the required climatic conditions for electricity generation.

This may lead to the creation of regional CCS hubs, as we are already seeing to some extent in Europe, and as is being contemplated by, for example, Japanese emitters in a series of early-stage agreements entered into with Malaysia.

With the potential for a significant number of large-scale investments (and follow-on M&A), in what may be new or untested jurisdictions (not to mention sub-sectors) for some investors and acquirors, companies will need robust diligence, appropriate deal structuring, and contractual protections to mitigate a range of possible new exposures. Even more time should be allocated than normal to forward scenario planning and contingent downside risk evaluation.

On a smaller geographic scale, there is a trend for locating renewable generation near to infrastructure with high energy demand such as data centres, says Chapman. This has been pioneered by large tech companies such as Google and Microsoft but is increasingly used across many industries, including generating power for mining operations.

‘Co-location often involves setting up a local microgrid which includes batteries, back-up generators and load-shifting capabilities in addition to the renewable generation,’ James adds. ‘Therefore, in addition to the environmental benefits and minimisation of transmission losses, the flexibility can be used to help balance the electricity grid and even earn revenue through grid balancing programmes.’

06. No business is an island: low-carbon investment requires a full value chain

Key insight

Sellers unable to credibly explain how key business inputs can reliably support the target business may struggle in transactions.

A key constraint of greenfield investment (and therefore M&A) is that with the deployment of new technologies, supply chains and value chains are not yet fully in place to service the entire requirements of any particular part of the global energy transition, says [Morgan](#). ‘Development is sporadic and lumpy and can easily lead to mismatches or bottlenecks which hamper the ability of a business to develop.’

For example, there are significant increases in energy price volatility due to the variability of the climatic conditions which renewable energy depends on.

This drives a need for additional investment in battery storage and grid/interconnector capacity, without which a development pipeline for renewables may well be significantly delayed.

[Chapman](#) points to hydrogen, where a lack of credible offtake demand is preventing investment in generation facilities. ‘Similarly, offshore wind – where M&A has been particularly active over the last decade – is suffering from significant supply chain issues in core components.’

Low-carbon businesses tend to be dependent on a range of other parts of the energy transition value chain, Chapman concludes. ‘As such, a seller’s inability to paint a credible picture of how key business inputs affecting the M&A target can reliably support the target business will increasingly lead to difficulties in executing transactions.’



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07. Setting up businesses/projects to facilitate M&A and realise synergies in future is critical

Key insight

Balancing the need for the right partners at the right time – providing construction expertise, IP, a route to market etc – with the need for shareholders to exit and recycle capital is often critical in a new business area.

The issue of future monetisation of assets may be addressed differently in respect of large-scale energy transition projects, such as new CCS initiatives and green hydrogen developments. Here, one of the often-overlooked key success points can be ensuring at an early stage of project design that the project is conceived with future M&A and value realisation in mind. Distinctions can also be made between (i) core assets; and (ii) the ancillary services that build, run and support the assets. The latter category of business often lends itself to accelerated growth and, with the associated returns profile, is particularly attractive to private equity investment, says [Morgan](#). ‘Spin-offs of non-core service businesses may allow for tangible and relatively quick monetisation and return on investment as well as providing capital for future core asset development.’

In the case of green hydrogen (which may comprise a large-scale renewables power generation facility with battery storage, an electrolyser facility with compressor, and a green ammonia plant with storage and offtake facilities), there are a number of opportunities to create separate profit centres which could be separately monetised in the future through M&A.

To achieve this requires careful thought at the business modelling and planning stage, subsequently supported by a clearly understood and robust contractual framework to implement a segmented project design.

Attempting to reconfigure projects post-development to achieve monetisation, as has been attempted or considered in respect of a number of LNG liquefaction projects to enable, for example, the sale of key pipelines to infrastructure players, can be extremely challenging, says [Chapman](#), advising to work through these issues at the project conception stage.

‘Ensuring that arrangements between stakeholders allow the right kind of future M&A is also important, not just from the business model structuring mentioned above, but also in the traditional drag and tag rights, right of first offer/refusal and lock-in periods that often feature in infrastructure M&A discussions, and related restrictions in any financing.’



Spin-offs of non-core service businesses may allow for tangible and relatively quick monetisation and return on investment as well as providing capital for future core asset development.

Striking the right balance between having the right partners in a business at the right time – sometimes providing construction expertise, sometimes IP, sometimes a route to market – with the need for shareholders to exit and recycle capital is a delicate operation that is often more critical in a new business area.

08. Sources of capital driving M&A activity (and their constraints) are changing

Key insight

A positive ESG score cannot mask a poor credit prospect, but can positively affect deals with marginal economics and/or in a busy M&A deal market with constrained debt liquidity.

As the energy transition proceeds, capital flows are evolving alongside shifts in the business landscape – and the two are shaping each other in fascinating ways, says [Chapman](#).

‘Traditional debt providers have increasingly aligned their credit risk-driven lending criteria with ESG requirements for a variety of reasons,’ Chapman observes. ‘The higher fees and margins available in newer, more risky energy transition assets have appealed in an increasingly low-margin, commoditised market where regulatory capital treatment of long-term finance has not incentivised further development of these business lines within banks.’

A combination of investor pressure and reputational considerations have also spurred a move towards a lending portfolio which is more balanced towards environmentally positive borrowings, Chapman adds.

‘This has started to reduce liquidity and increase costs in the market for M&A of higher carbon assets where bank debt – and in particular longer dated bank debt – is now becoming harder to obtain. Combined with current increased interest rates, these factors are starting to put a squeeze on the more marginal higher carbon M&A opportunities where the days of cheap debt being the primary driver for equity returns are over.

A preference for environmentally positive lending has also, conversely, created greater liquidity in the market for ESG-positive M&A activity, where banks will be more inclined to participate in deals where they see a bright future lending to a business (or an investor in that business) that may well have greater longevity due to its ESG profile. This has the effect of crowding debt funding towards more ESG-positive M&A activity.

While a positive ESG score will not be able to mask a poor credit prospect, it does have the effect of making a positive difference to deals which have marginal economics and/or which may be trying to transact in a busy M&A deal market with constrained liquidity in the debt market.

The business model pioneered over the last couple of decades of enabling a developer of a low-carbon project or portfolio business to sell down an equity stake to institutional money (pension funds, insurers and the like) and so recycle capital to use on new ventures is now well established. It has relied on:

- the willingness of private developers to take on, in particular, construction and technology risk; and
- the long-term, stable nature of available from many low-carbon projects (often, though decreasingly, supported by government subsidy) once they are operational.

CASE STUDY

CPPIB / Power2X

In July 2023, Freshfields advised Canada Pension Plan Investment Board on its long-term investment partnership with hydrogen project developer Power2X aimed at advancing Power2X’s leading role in the global clean energy transition.

To meet the growing need for rapid industrial decarbonisation, the partnership is investing an initial €130m to accelerate the growth of Power2X as a development platform of large-scale new energy assets and infrastructure that will assist with decarbonising industrial value chains.

09. Private capital trends are affecting energy transition M&A

Key insight

Financial investors are discovering the difficulty of assessing and reporting on the (often varied) ESG characteristics and impact of their investments.

Broader trends within private capital are now intersecting with the energy transition.

An increased prevalence of more complex instruments and a wider array of capital providers making investments in energy and infrastructure assets, says [Chapman](#).

‘With higher interest rates and a glut of dry powder, fund managers are needing to find more niche, interesting and risky opportunities to deploy their capital. This often fits the energy transition profile well alongside the ESG-positive nature of these targets.’

Limited partner (LP) and general partner (GP) consolidation has been particularly noteworthy in the energy and infrastructure space (for example, the recent Blackrock/GIP, General Atlantic/Actis and CVC/DIF buy-outs).

Investment management in this sector is seen as such a significant investment opportunity due to the step up in assets and deal volumes, Chapman adds. ‘We anticipate further deal flow in this space to reflect the increased interest in both transactions in, and management of, these assets by non-strategics.’

As reported in Infrastructure Investor’s December 2023/January 2024 Issue, energy transition is the fastest-growing segment of infrastructure investing, likely to be ‘become as big as the rest of infrastructure over the medium term.’

Governments have recognised the need for the private sector to take an appropriate role in funding the energy transition, Chapman says. ‘National balance sheets cannot support the sheer amount of direct capital investment required, and the private sector has proven repeatedly its ability to drive value which can be harnessed by appropriate government action.’

The public sector has, by now, established a keener sense of what is required to attract M&A investment (including from foreign sources). The increased reliability of cashflows from energy assets reliant upon government support has continued to drive the increased private sector investment into these critical assets and businesses.



With higher interest rates and a glut of dry powder, fund managers are needing to find more niche, interesting and risky opportunities to deploy their capital.

To support this deployment of private capital into the energy transition, the EU, UK, US and others have rolled out a variety of legislative and policy programmes. The Inflation Reduction Act is the most significant climate legislation in US history and looks to incentivise clean energy through tax reductions and funding incentives.

State support is not new and has long underpinned renewable projects in the UK and Europe. However, the EU and UK, in addition to industry-level environmental and climate regimes around emission reductions and eco-design, are now looking beyond tax incentives and financial support mechanisms to drive investment into the energy transition.

Through a range of ambitious anti-greenwashing and transparency rules, the EU seeks to empower investors and funds to target and deploy capital into more sustainable businesses and projects.

CASE STUDY

Macquarie / SkyNRG

In November 2023, Freshfields advised Macquarie Asset Management's specialist Green Investments team on an initial investment of up to €175m in SkyNRG.

The investment is expected to support SkyNRG in its next phase of growth and help achieve its ambitious goal to become a major Sustainable Aviation Fuels (SAF) producer through the development and operation of SAF production facilities.

This deal demonstrates how companies are taking advantage of the opportunities resulting from tailwinds such as growing political and regulatory support for corporate net zero targets and commitments. Increased SAF production capacity will play a part in enabling the aviation industry to meet its net-zero goals.

The [EU's Green Deal](#), which, has given rise to the [Sustainable Finance Disclosure Regulation \(SFDR\)](#), EU Taxonomy and Corporate Sustainability Reporting Directive (CSRD) is forcing investors, financial institutions and corporates to consider and report on the ESG risks and opportunities associated with their businesses and investment products.

This, coupled with ESG benchmarking rules and net zero commitments, signals a clear shift in corporate strategy and investment focus. Energy transition is at the heart of this, and these regulatory developments have played a significant role in accelerating the growth of dedicated impact and green investment funds.

Crucially to remain within the guardrails of these sustainable finance regimes, funds now need to thread the needle for what constitutes 'sustainable investments' and be mindful of sometimes-complex ESG rules.

Financial investors are discovering the difficulty of assessing and reporting on the (often varied) ESG characteristics and impact of their investments, says [Morgan](#).

'The ESG profile of any business has always been difficult to evaluate across multiple criteria, but the increased complexity and nuance in understanding the wide range of ESG factors, together with a variety of new legislation, has made this more difficult, and can make M&A processes more costly and time-consuming,' Morgan adds. 'That said, aligning a project or business with one of the regulatory categorisations – for example, EU taxonomy-aligned or meeting an impact fund's SFDR Art. 9 criteria – could potentially add real value.'

This is proving far from straightforward. Even for projects which are seen as environmentally beneficial overall, there are often ESG complications.

Green hydrogen projects, for example, have a significant land footprint (for renewable energy supply and the production facilities) and water footprint (including potentially desalination facilities) which, depending on where they are located, could increase pressure on scarce land and water resources.

Ammonia, currently seen as the most likely vector for long-distance hydrogen transport, can be environmentally damaging. There are concerns that parts of the solar panel supply chain may involve unethical employment practices, and that in some cases fossil fuels remain the mainstay power source for the manufacturing of key components of clean energy technologies, such as wind turbines.

While these kinds of complexities are inherent to any large-scale business, the focus of the EU rules on 'good governance' and 'do no significant harm' is leading to increased scrutiny from LP/shareholders, the wider stakeholder community, and potential future purchasers. Managing these complexities will inevitably introduce friction to the M&A process.

10. Antitrust and FDI controls are influencing energy transition M&A

Key insight

Getting M&A over the antitrust hurdle primarily requires demonstrating positive externalities (a climate benefit) that offsets harms to competition.

Anticipating and navigating an ever more complex antitrust and foreign investment landscape is crucial to securing regulatory clearance for transformational transactions.

The interface between the green agenda and increasing regulation of M&A necessitates a detailed understanding of existing regimes, regulators' attitudes and enforcement priorities, and how climate-related initiatives are perceived.



The difficulty in getting over the antitrust hurdle primarily lies in demonstrating that positive externalities... offset harms to competition

In the antitrust context, a number of competition authorities (including in the EU, the UK, the Netherlands, Australia, Japan, New Zealand and Singapore) have published tailored guidance or have adopted decisions that are helping businesses to pursue their sustainability goals while staying on the right side of antitrust laws when cooperating with competitors. (See our analysis of the [EU](#), the [UK](#), [Japan](#) and [Singapore](#).)

Such guidance presages that some competition authorities may consider tangible environmental-related benefits in individual cases to offset harms to competition – though such balancing tests often place a significant evidentiary burden on parties making the environmental claim.

There is less of an opening in the US, where several states have raised antitrust concerns with sustainability initiatives, and both Federal Trade Commission Chair Lina Khan and DOJ Assistant Attorney General Jonathan Kanter [have stated that](#) collusive activities even within the ESG context would not be exempted from the application of the antitrust laws.

As such, even with openings in certain jurisdictions, antitrust rules can be expected to frustrate some efforts to consolidate, even if the latter are grounded in a climate- or sustainability-based rationale, says [Morgan](#).

'If engaging in M&A to further environmental aims, the difficulty in getting over the antitrust hurdle primarily lies in demonstrating that positive externalities – in this case, a climate benefit – offset harms to competition.'

Such 'efficiency defences' are hard to concretise, even more so in the climate context. Unlike other economic benefits, climate and other types of sustainability efficiencies may extend to wider society, may be achieved well in the future, and are difficult to quantify, as opposed to being limited to customers or consumers in the markets affected by the transaction.

It remains to be seen whether and to what extent competition authorities will be willing to consider different kinds of benefits beyond the affected markets involved in a transaction. (We recently conducted [a debate on antitrust and sustainability](#).)

There have been (isolated) openings, however. In 2023, for example, the [Australian ACCC authorised the Brookfield/Origin Energy merger](#) on the basis that the claimed environmental benefits would outweigh the identified competition concerns, despite long-standing concerns with vertical integration in the energy sector.

The Australian ACCC determined that the transaction would benefit Origin's customers and Australians more broadly by accelerating renewable generation and storage build-out and reducing greenhouse gas emissions in Australia, which was a material public benefit.

The Australian ACCC still imposed remedies to mitigate the merger's perceived detriment to competition.

This important decision could serve as inspiration for other competition authorities to take account of sustainability benefits in future merger reviews. (The [antitrust and sustainability section of our Antitrust in 2024: 10 Key Themes report](#) has more information on this.)

At a more substantive level, competition authorities have recognised that sustainability considerations can form an important parameter of competition, potentially complicating climate or sustainability-driven M&A further. (See, for instance, [the European Commission's revised Market Definition Notice](#).) For example, consumer preferences for 'green' products can lead to potentially narrower market definitions.

In a proposed merger of two Korean shipbuilders, [the European Commission considered](#) innovative vessel technologies, including those enabling lower fuel consumption, as a factor in product differentiation.

Furthermore, transactions' potential restrictive effects on future sustainability-driven innovation have become of particular interest to competition authorities, leading to remedies.

In the GE/Alstom merger, the European Commission raised a concern over reduced sustainability innovation, fearing that certain Alstom gas turbine models would not be commercialised after the proposed merger. To address this concern, [the parties offered to divest the relevant gas turbine business and committed to ongoing technology development](#).

Likewise, in the Norsk Hydro/Alumetal merger, the European Commission conducted an in-depth investigation to ensure that the transaction would 'not have a negative impact on the competitive landscape for certain aluminium markets and in particular green aluminium products for European automotive customers.'

Beyond competition, rising geopolitical tensions and the increasing focus on energy supply security are driving governments worldwide to tighten their grip on foreign investments in the energy sector.

Notably, the UK's National Security and Investment Act designates energy as one of the 17 'sensitive areas'. (The Act specifies transactions involving upstream oil and gas, downstream oil and gas and electricity.)



An overarching concern in the energy M&A scene is whether foreign subsidies could give rise to undue competitive advantages in domestic markets.

Similarly, [the US identifies](#) clean energy technology and climate adaptation technology as 'fundamental' to national security and directs the Committee on Foreign Investment in the US to examine relevant transactions' effect on supply chain resilience and security.

It is difficult to see how these objectives would be set aside even in the event of a clearly net-positive acquisition by a buyer who raises national or supply security concerns, says Morgan. 'At the same time, with a global subsidy race unfolding, an overarching concern in the energy M&A scene is whether foreign subsidies could give rise to undue competitive advantages in domestic markets.'

To address this issue, the EU has introduced the Foreign Subsidies Regulation (FSR), which establishes an additional mandatory and suspensory obligation on parties meeting certain thresholds to notify financial contributions received from non-EU states.

The US has also [proposed amendments to the Hart-Scott-Rodino notification form](#), requiring parties to identify subsidies received from a ‘foreign entity or government of concern’.

In the UK, subsidies in sensitive sectors, such as production of electricity, would need to be referred to authorities for evaluation if applicable thresholds are exceeded. (See [statutory guidance](#) for the UK Subsidy Control Regime.)

In short, prior multi-dimensional risk assessment is important in navigating the increasingly intricate web of parallel regulatory regimes.

From a deal execution perspective, it is crucial to allow for sufficient time for potentially lengthy reviews, to ensure that deal and other documents fully accord with the stated deal rationale – including its environmental benefits – and that such benefits are clearly articulated and quantified.

From a national security perspective, knowing the sensitivities and priorities of regulators is important to address, and possibly even pre-empt concerns, for example from a supply stability standpoint.

Finally, keeping an overview of various financing streams and how these are utilised will be important to counter any claims of unfair or distortive subsidies.

SECTION THREE

Climate transition M&A by country

Deal count and capital invested (US\$bn) across the globe from 1 January 2023 to 24 May 2024 in selected climate transition categories.

<p>UNITED STATES</p> <p>DEAL COUNT</p> <p>3,323</p> <p>CAPITAL INVESTED</p> <p>\$112.4bn</p>	<p>UNITED KINGDOM</p> <p>DEAL COUNT</p> <p>1,072</p> <p>CAPITAL INVESTED</p> <p>\$39.0bn</p>	<p>INDIA</p> <p>DEAL COUNT</p> <p>458</p> <p>CAPITAL INVESTED</p> <p>\$35.0bn</p>	<p>CHINA</p> <p>DEAL COUNT</p> <p>1,152</p> <p>CAPITAL INVESTED</p> <p>\$32.7bn</p>	<p>AUSTRALIA</p> <p>DEAL COUNT</p> <p>305</p> <p>CAPITAL INVESTED</p> <p>\$28.1bn</p>
<p>GERMANY</p> <p>DEAL COUNT</p> <p>575</p> <p>CAPITAL INVESTED</p> <p>\$19.1bn</p>	<p>CANADA</p> <p>DEAL COUNT</p> <p>605</p> <p>CAPITAL INVESTED</p> <p>\$12.7bn</p>	<p>SPAIN</p> <p>DEAL COUNT</p> <p>256</p> <p>CAPITAL INVESTED</p> <p>\$8.8bn</p>	<p>FRANCE</p> <p>DEAL COUNT</p> <p>470</p> <p>CAPITAL INVESTED</p> <p>\$8.6bn</p>	<p>SOUTH KOREA</p> <p>DEAL COUNT</p> <p>241</p> <p>CAPITAL INVESTED</p> <p>\$7.2bn</p>
<p>ITALY</p> <p>DEAL COUNT</p> <p>219</p> <p>CAPITAL INVESTED</p> <p>\$6.0bn</p>	<p>SWEDEN</p> <p>DEAL COUNT</p> <p>256</p> <p>CAPITAL INVESTED</p> <p>\$6.0bn</p>	<p>NETHERLANDS</p> <p>DEAL COUNT</p> <p>280</p> <p>CAPITAL INVESTED</p> <p>\$4.6bn</p>	<p>DENMARK</p> <p>DEAL COUNT</p> <p>146</p> <p>CAPITAL INVESTED</p> <p>\$4.3bn</p>	<p>BELGIUM</p> <p>DEAL COUNT</p> <p>86</p> <p>CAPITAL INVESTED</p> <p>\$3.8bn</p>

TOTAL
DEAL COUNT ▶ **11,714**

TOTAL
CAPITAL INVESTED ▶ **\$369.9bn**

Source: PitchBook Data, Inc. with analysis by Freshfields.

The volume and nature of energy transition transactions in a region is influenced by factors ranging from geographical characteristics (proximity to key markets, solar and wind resource, geologic structure (eg for CCUS)), regulatory and fiscal development and consistency, access to finance and skills.

MENA

 The main hydrocarbon-producing Gulf states (including KSA, Qatar and UAE) have seen a significant increase in revenues from an already high baseline following the Ukraine war's impact on global gas prices (and short-term investment in gas and gas infrastructure as an energy transition-compatible energy security play).

While some of this has been diverted for domestic purposes, much has been deployed in funding state-sponsored M&A, both regionally and in other geographies, in energy transition projects.

Regionally, the Gulf states have significant ambitions to become market leaders not just in the traditional petrochemical/hydrocarbon value chains but also in the new molecule space: blue and green ammonia, e-methanol, syn-fuels and other low-carbon products.


Although there is the economic and political imperative to build these projects (take NEOM as an example), foreign investment is required in order to realise these projects.

Even where hydrocarbon wealth is not a particular economic driver, geographical advantages are attracting significant investment in new technologies in the region.

Oman and Egypt are seen as key green hydrogen hubs for the global market, and the North African nations (in particular Morocco and Tunisia) are seen as a supplier of green electrons (via sub-sea interconnector) or molecules (via pipeline or ship) to Europe.

All of these businesses are in need of inbound M&A investment in order to provide the capital funding and skills to make these businesses a reality.

EUROPE

 In addition to the continent's already booming energy and infrastructure M&A industry, significant amounts of transactional activity are being driven by investment encouraged by new regulatory incentives

For instance, the EU is focused on incentives for the use of hydrogen and hydrogen derivatives produced by electrolysis of water which qualify as Renewable Fuels of Non-Biological Origin (RFNBOs).

Hydrogen and hydrogen derivatives are RFNBO compliant if they are produced using electricity from qualified renewable sources and have a greenhouse gas emission reduction of 70 per cent compared to applicable fossil fuel comparators. Recent amendments to the Renewable Energy Directive II (REDII) require each Member State to ensure that 42 per cent of the hydrogen used in industry is RFNBO-compliant by 2030 and 60 per cent by 2035. This clear long term price signal is ensuring a consistent flow of capital into projects and businesses which will support these requirements.

Wider regulatory measures, ranging from disclosure under the Task Force on Climate-Related Financial Disclosures (TCFD) – [which has now been absorbed into IFRS Foundation](#) – to the assistance to the domestic supply chain offered by the Net-Zero Industry Act (NZIA), continue to provide the reliable environment in which investments can continue.

However, national and geographic attributes continue to have a significant influence on deal flow notwithstanding the wider European framework. Investors remain wary of Spanish renewables transactions given the retroactive changes to subsidies in the recent past, which resulted in a number of high-profile investor-state bilateral


investment treaty claims being brought against the Spanish government, but the availability of solar energy in the southern European states continues to drive M&A in operational and development phase projects.

The prevalence of low-carbon energy in the Nordics is driving investment in green hydrogen for domestic use, and the UK's regulated environment for CCUS investment is driving increasing interest from a wide range of domestic and international investors.

Offshore wind, a technology that has only been deployed at significant scale in Europe to date, generally remains a sector of great interest for many investors, both strategic and financial, especially in the brownfield portion of the sector. This investment is helping the existing developer pool recycle capital and formulate plans for how best to deploy funding into a less certain environment.

However, the greenfield portion of the sector is currently experiencing difficulties. This is mostly driven by increases in supply chain costs globally, with required government support for the sector falling short of what developers need to underpin their investments (see, for instance, the failure of the latest auction round in the UK). Long-term O&M and decommissioning costs are also becoming a more substantial issue for investors to consider.

UNITED STATES

 For the first time in 2023, wind and solar generated more electricity in the US than coal – a key milestone for the country's energy transition. This was supported by key legislative measures including, most importantly the Inflation Reduction Act.

A material proportion of new investment was into solar projects, with wind power generation actually falling in 2023. Geographically a significant majority of this investment was in California and Texas, the nation's two most populous states.

Both corporate and asset level renewables M&A activities nevertheless declined in 2023, with corporate deals down roughly 25 per cent year-on-year by volume compared to

2022, with 45.4GW of solar project acquisitions taking place in 2023, compared to 66GW in 2022. This was the result, to a large extent, of macro-economic conditions and the challenging interest rate environment creating a greater disconnect between buyer and seller valuations and significantly reducing the number of larger leveraged buy-outs that were completed in 2023. As market conditions improve in 2024, deal activity is expected to rise.


At the same time, a relocation of capital to clean energy and away from traditional hydrocarbons, a significant reduction in capital expenditure in oil and gas exploration activities, and the continuing strength of domestic and global gas demand, has resulted in material consolidation in the US oil and gas sector. In Q4 2023 alone \$161bn of deals were announced, including ExxonMobil's proposed \$64.5bn acquisition of Pioneer Natural Resources and Chevron's proposed \$53bn acquisition of Hess Corporation. This consolidation looks set to continue as synergies and the lower cost (and greater availability) of capital for majors drives deal activity.

With a significant proportion of new energy transition investment and M&A activity having been in the renewables space in recent years, and with far less investment and activity in grid transmission and storage, the latter will be a key area to watch in the coming years. If significant investment is not made into transmission and storage, the US power market could experience significant price volatility and instability.

Outside of electricity generation, incentives from the American Jobs Plan, the CHIPS Act and the IRA have also encouraged investment and M&A across a broader spectrum of decarbonising and energy-transition related sectors, including into hydrogen, CCUS, renewable gas, as well as the broader vertical integration of supply chains by OEMs of EVs and other manufacturers in decarbonising industries.

It remains difficult to assess the impact that any change in US President in 2025 could have on the US's road to transition, and whether many of the incentives which have undeniably increased investment and M&A activity into green industries in recent years could subsequently cease to be available.

ASIA-PACIFIC

 As a continent with more than 60 per cent of the world's population producing more than 50 per cent of global carbon emissions (from many of the world's fastest growing economies and populations), decarbonising the Asia-Pacific region is arguably the most critical challenge for global energy transition.

One key recent theme we have seen is that there has been significant downstream investment into Southeast Asia by OEM's and automotive companies from across China, the US and the EU, that are looking to secure critical metals and minerals in the EV supply chain.

China remains the dominant player and leader in EVs (and the majority of other transition technologies), which both increase its manufacturing and technology exports and reduce its dependence on imported hydrocarbons.

In this context, we have seen Indonesia become a key focal point for transactional activity in the Asian EV industry, due to its world-leading nickel reserves.

Companies from CATL (the world's largest EV battery maker) through to Volkswagen have entered into joint ventures focused on integrating supply chains of key components, and regular M&A activity in the sector has followed, with deals such as United Tractors' \$620m acquisition of a stake in Nickel Industries.

Outside of India and Australia, renewables portfolio aggregation and M&A is happening at a slower pace than in the West, although we do expect a handful of material portfolio M&A transactions to take place in 2024.

Inadequate or changing regulatory incentives and regimes, grid capacity and transmission challenges, and supply chain and logistic bottlenecks have slowed the creation of operating portfolios with scale across the region.

Japan, and, to some extent, Taiwan and South Korea (all countries which import a significant majority of their primary energy and for whom greater renewables capacity materially improves energy security) have remained strong markets for renewables, but primarily at the development stage rather than for M&A activity. The Philippines is increasingly appearing as a bright spot for investors in Southeast Asia.

CASE STUDY

SSE Renewables / Pacifico Energy K.K.

In September 2021, Freshfields advised SSE Renewables on a sale and purchase agreement with Pacifico Energy to form a joint ownership company to pursue offshore wind energy development projects in Japan.

The transaction consisted of the acquisition of Pacifico Energy's offshore wind assets by the joint ownership company (together with the transfer of certain key employees) and was SSE's first sizeable investment into Asia.

The move combines SSE's expertise, as one of the world's largest developers and operators of offshore wind farms, with Pacifico Energy's extensive local experience in Japan in local preparatory development work.

At this stage, the joint ownership company is progressing a 10GW portfolio of development opportunities.

As stated by Jim Smith, Managing Director of SSE Renewables: 'Today is an exciting next step for SSE Renewables as we enter Japan which has huge ambitions for offshore wind deployment. And in Pacifico Energy we have found a fantastic local partner with hugely complementary local capabilities, experience and insights that can help bring our expertise in developing, building and operating offshore wind to this market.'

Nevertheless, Chinese dominance of transition technologies has meant that cross-border transition M&A opportunities in the technology space in the region have typically been more early stage or focused on joint venture opportunities in India.

Although still nascent, two decarbonising sectors where JV formation and M&A activity is starting to pick up pace in Asia-Pacific are green hydrogen and CCUS.

The region's unique dynamic of twin industrial, emitting powerhouses in North Asia (Japan and South Korea), which do not have domestic hydrocarbon resources or, seemingly, appropriate geology for carbon sequestration, is driving significant investment in these sectors to the South, into Australia, Southeast Asia and India. This has the potential to create new energy value chains and new decarbonising trade routes in the region.

If government fiscal support can make these projects bankable, we anticipate significant future investment and M&A in this space, not just from Japanese and Korean trading houses and strategics, but also from global infrastructure funds and other financial investors.

SECTION FOUR

Conclusion and further information

M&A is not the only mechanism by which the energy transition will be delivered, but has a far more important role than many appreciate. More conservative and organic change will likely not be enough.

As regulatory pressure on companies to decarbonise builds over the coming years, accompanied by pressure from shareholders, customers and other stakeholders, we see an increasingly important role for M&A in corporate transformation.

Regional, technological and sectoral variations are providing a wide range of opportunities for successful and value accretive M&A for both buyers and sellers in a critical and exciting set of industries, but those opportunities inevitably come with significant challenges and risks to be understood, analysed, mitigated and addressed.



The challenges posed by M&A of this nature may be acute, but transformation is rarely a smooth ride. While there will be issues and obstacles to navigate, with the right preparation, structuring and advice, there is real value to be unlocked in tandem with substantial climate benefits.

How Freshfields can help

In a world of increasing regulation, stakeholder influence and rising expectations from society, it's clear that sustainability is a board- and C-suite-level priority. We have a long track record of advising the world's leading national and multinational corporations and financial institutions on ground-breaking and business-critical challenges, including climate focused M&A.

Understanding the legal landscape of environmental, social and governance issues across jurisdictions is essential in building a resilient business. Throughout this report, you have seen just a few of the successes we have helped our clients realise.

We understand both the local intricacies and global strategies needed to get complex and transformational transactions over the line. Our team of more than 2,800 lawyers and other legal professionals delivers global results from our 30 offices worldwide.

To discuss anything you found interesting in this report, please get in touch with [Jake Reynolds](#), Head of Client Sustainability and Environment, or any of your usual Freshfields contacts.

SECTION FIVE

Annex: background on decarbonising M&A

Across the world, business is experiencing an unprecedented transition. The deliberate process of reimagining and rewiring economic activities is crucial to maintaining a competitive edge on a decarbonising planet.

In [a recent survey from PwC](#), almost half of chief executives felt their companies will cease to exist within a decade without reinvention, with the climate crisis being a major driver of physical, reputational and competition-related risks.

From the canal boat to the train, horse-drawn carriage to EV, coal-fired plant to solar array, transition is characterised by the diffusion of new technologies.

Companies innovate at different speeds and scales according to their business strategy and the external pressures they face, and consequently prosper and fail at different rates. However, the current transition to net zero is not only shaping the fortunes of companies, but also the temperature and weather patterns of the planet, and with it the resilience of the entire economy.

“

Many companies are trying to transition through combinations of ambitious science-based targets, efficiency improvements, innovations in products and processes, and supply chain engagement. But it's not enough.

After muted progress in Egypt, Dr Sultan Al Jaber, [expressed to the FT his hopes for COP28](#) in Dubai. ‘We’ve had 27 COPs,’ he said, ‘Please let me deliver something tangible this time.’ By the end of the conference, [Dr Al Jaber was jubilant](#), concluding that ‘[the world needed to find a new way... \[and\] we have found that path.](#)’

If Dr Al Jaber is correct, we have [started a journey](#) towards a ‘new normal’ for business, building on the UAE consensus to ‘[accelerate efforts towards the phase-down of unabated coal power](#)’, phasing out inefficient fossil fuel subsidies, and other measures that drive the transition away from fossil fuels in energy systems, in a just, orderly and equitable manner, with developed countries continuing to take the lead.’

The legal implications of energy transition

Energy transition has significant legal implications for companies, from mandatory disclosure and transparency to litigation, antitrust to M&A.

Every tool in the box – legal and otherwise – will be needed to enable companies in carbon-intensive sectors to grow into new, future-fit forms. Policy will remain the most influential tool, but governments subject to a never-ending list of near-term pressures from conflicts, living standards, migration and extremism have yet to muster consistent ambition.

The onus is on companies and financial institutions to take the lead, explains Reynolds. ‘Many companies are trying to transition through combinations of ambitious science-based targets, efficiency improvements, innovations in products and processes, and supply chain engagement. But it’s not enough.’

The scientific community is clear that emissions need to drop by 43 per cent from 2019 levels by 2030 (and 60 per cent by 2035) if we are to maintain average global warming under the Paris ambition of 1.5°C.

Radical action to achieve transition

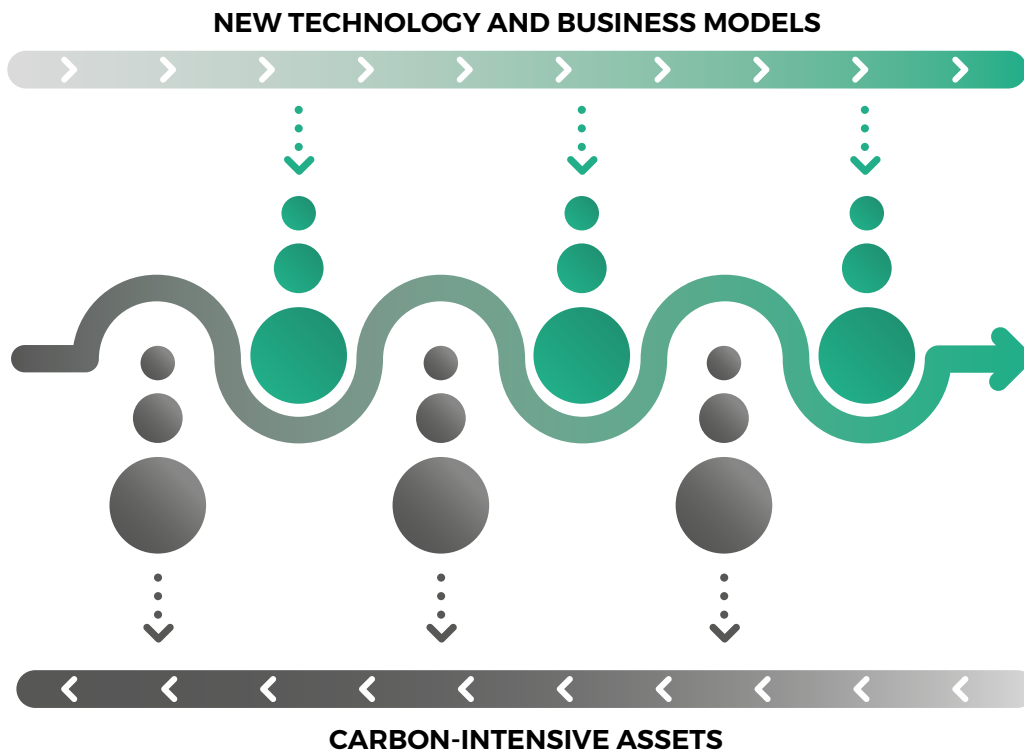
The temperatures in 2023 temporarily broke the 1.5°C threshold, showing how perilously close we are already with global emissions still rising.

Companies must move fast to reinvent themselves over the next decade into low-carbon enterprises, and thus play an effective role in stabilising the climate, says Reynolds. ‘Companies will need to find new and radical alternatives to their current operating models. Incremental change may not be enough.’

Where internal skills or resources are insufficient, companies may need to look outside for inspiration, potentially through JVs, M&A, or other forms of projects and investments.

Similarly, companies may need to shed ‘legacy’ business units that are at risk of becoming stranded due to their high carbon intensity and misalignment with future business models.

‘The challenges are considerable and, for some, current operating models will need to radically change,’ Reynolds says. ‘But such seismic changes will also present growth, innovation and value creation opportunities.’



M&A as a contributor to low carbon transition

As companies seek to transition, M&A can play a vital role in accessing new technologies and business models, while divesting carbon-intensive assets. Such transactions can have a transformative effect over time, complementing other forms of business innovation.

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