

Brownfield is the new Greenfield

A strategic shift in equity
and debt to capture next-
generation renewables

Foreword

Europe's renewable energy landscape is at an inflection point. The first generation of onshore wind turbines and solar photovoltaic installations – built during the boom years of the 2000s and early 2010s – is rapidly approaching the end of its designed operational life. **74 GW of European onshore wind capacity will require a repowering**, life-extension, or decommission decision by 2030, while tens of gigawatts of solar PV assets installed under generous feed-in tariff regimes in Germany, Italy, and Spain are now 13 to 20 years old.

These aging assets occupy Europe's most productive renewable energy sites — locations selected decades ago for their superior wind or solar resources, with established grid connections, proven permitting histories, and accepted community presence. Replacing legacy equipment at these sites with modern, high-efficiency turbines and modules can nearly triple installed capacity and triple electricity output, all without the multi-year delays associated with greenfield development. In a continent constrained by grid bottlenecks, lengthy permitting processes, and growing electricity demand from electrification, data centres, and hydrogen production, repowering is not merely an asset management decision. It is a strategic imperative for the energy transition. Yet despite the scale of the opportunity, only a fraction of aging capacity is projected to be repowered by 2030. WindEurope projects approximately 16 GW of full repowering across Europe between 2026 and 2030 — up from just 2 GW commissioned in 2025 — with annual volumes expected to rise from around 2 GW to around 4 GW by 2030. The broader 74 GW cohort facing a repowering, life-extension, or decommission decision by 2030 means full repowering will represent only a fraction of sites, with the majority of owners opting for life extensions. The bottleneck lies not principally in economics or technology but in the complexity of financial structuring: how to transition assets from legacy fund structures to new investment vehicles, how to bridge the revenue gap between old subsidy regimes and new market-based income, and how to structure debt that accommodates the unique risk profile of a portfolio undergoing phased repowering within a live, cash-generating operation.

This white paper examines the equity and debt structuring strategies required to unlock repowering investment at scale across Europe. It addresses **two complementary investment approaches**: the hold-and-operate model through continuation vehicles, and the active portfolio management model through capital recycling and IRR optimisation. Drawing on landmark transactions — including CYCAP's managed Renewables Fund 9 (RF9), for which Eight Advisory acted as financial and tax adviser — the paper provides a practical framework for institutional investors and lenders seeking to deploy capital into Europe's next-generation renewable assets.

Getting in touch:



Thomas Gummert

Partner | Infrastructure, Energy
& Project Finance

thomas.gummert@8advisory.com



Mathias Köhler

Director | Infrastructure, Energy
& Project Finance

Mathias.koehler@8advisory.com



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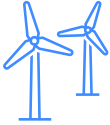
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The European Repowering Opportunity

The aging fleet: wind and solar

The EU plus UK has approximately **304 GW** of installed wind power capacity (265 GW onshore, 39 GW offshore) and over **361 GWp** of solar PV.



Wind power

A significant portion of this fleet is aging. Approximately 20% of Europe's roughly 90,000 onshore wind turbines are 15 years or older, and by 2030 an estimated 65 GW of wind farms will have been operating for 20 or more years, with 34 GW already past this threshold according to latest data. Critically, the 74 GW cohort facing an imminent repowering, life-extension, or decommission decision spans both the "deep aging" layer already past 20 years and the wider fleet approaching that threshold — meaning the repowering imperative is concentrated in the oldest, most time-sensitive assets. The aging fleet is concentrated in the countries that led Europe's first wave of renewable deployment.



Solar power

On the solar side, the first PV boom was even more concentrated in time. Germany alone accumulated approximately ~32.6 GWp of cumulative installed PV capacity by end-2012, representing one of the largest PV deployment surges globally in that period.

Italy added roughly 13 GWp in the same window during the Conto Energia incentive programs, and Spain's solar surge came earlier, with a record 2.6 GWp installed in 2008. France installed approximately 4 GWp between 2010 and 2013. These first-generation solar assets — now 13 to 16 years old — are approaching the age at which inverter replacements, module degradation, and subsidy expiry converge to make revamping or full repowering economically rational.

Figure 1: European onshore Wind Capacity aged over 15 years, in GW



Source: WindEurope, Eight Advisory Analysis

EightAdvisory

The capacity uplift potential

The technological progress in renewable energy over the past 15 years has been extraordinary.

Modern onshore wind turbines, with nameplate capacities of 5–7 MW and rotor diameters exceeding 160 metres, produce several times the output of the 1–2 MW machines installed in the early 2000s.

Figure 2: Less infrastructure. More energy.



Source: WindEurope, Eight Advisory Analysis

EightAdvisory

According to WindEurope, repowering on average reduces the number of turbines at a wind farm by approximately one-third while more than doubling installed capacity and tripling electricity output on average. In concrete terms, a wind farm of 20 turbines rated at 1 MW each (20 MW total) might be repowered with 8–10 turbines rated at 6 MW each (50–60 MW), producing roughly three times the annual energy output with a smaller physical footprint.

Similar dynamics apply in solar PV. The efficiency of commercially available modules has roughly doubled since 2010, meaning that a repowered solar park can generate significantly more electricity from the same land area.

A key distinction in solar is between revamping (restoring a plant to its original design capacity) and full repowering (replacing modules, inverters, and potentially mounting structures to exceed original capacity). Inverter end-of-life, which typically occurs after 10–15 years, often serves as the practical trigger for a broader upgrade program.

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Perhaps the most compelling aspect of the repowering opportunity lies in the strategic value of existing site infrastructure.

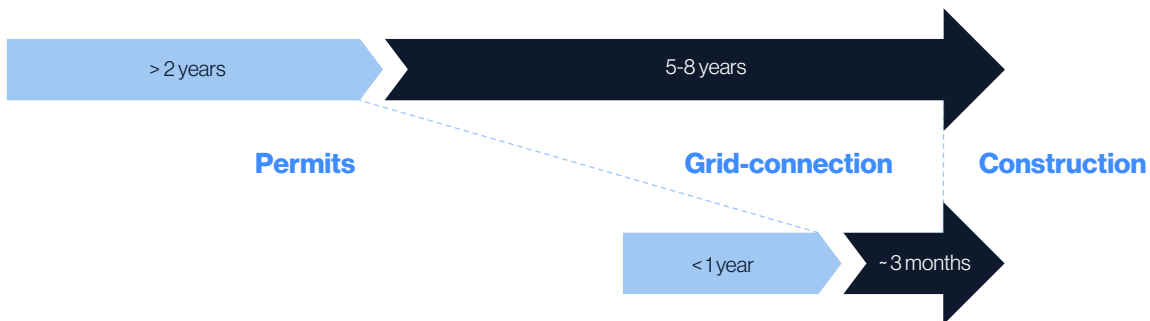
Grid connection points in Europe are increasingly scarce and subject to multi-year waiting lists. Securing a new grid connection for a greenfield project in Europe can take five to eight years depending on the specific country when accounting for application, approval, and physical construction. Repowering can largely sidestep this bottleneck, as existing grid connections can typically be retained and, where needed, upgraded.

Repowering projects can also retain established permitting histories, benefit from stronger community acceptance, and draw on robust environmental and resource baselines at the site – advantages that can take years to develop for a greenfield project. Under the EU's revised Renewable Energy Directive (RED III), the EU framework caps the permit-granting process for repowering at six months inside designated Renewables Acceleration Areas (RAAs) and one year

or less outside RAAs, with grid-connection decisions for repowering to be issued within three months in the best case – timelines subject to national transposition and project-specific circumstances. By contrast, greenfield projects outside RAAs may take up to two years to secure permits.

This combination of infrastructure advantages, reduced development timelines, and lower planning risk makes repowering sites exceptionally attractive from an investment perspective. The structural increase in European electricity demand from electrification of transport and heating, data centres, and green hydrogen further reinforces the case: every additional megawatt-hour of clean generation enabled by repowering contributes directly to closing the growing supply-demand gap.

Greenfield projects | 7 to 10 years before site construction launch



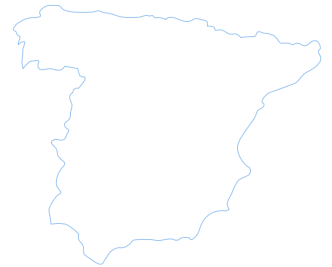
Brownfield projects | approximately 2 years before site construction launch

The regulatory framework

The regulatory framework is accelerating this opportunity. Progress on permitting reform is uneven but real:



Germany permitted a record **20.7 GW** of new onshore wind in 2025, with average permitting timelines of approximately 17 months – one of the most advanced regulatory environments in Europe.



Spain has two dedicated repowering schemes operational with a third expected, though grid constraints continue to impede capacity increases at repowered sites.



France has widened Environmental Impact Assessment (EIA) exemption eligibility for repowering, while **Italy** has removed the lower bid price ceiling that previously disadvantaged repowering projects in auction rounds.



The **UK's** decision to include repowered onshore wind in the AR7 Contract for Difference (CfD) round provides a model that other European markets are beginning to follow.

These country-level evolutions are gradually narrowing the permitting gap that has historically been the primary bottleneck to at scale, and the design of auction frameworks that appropriately value the speed and reduced risk of repowering over greenfield development remains the most impactful remaining policy lever.

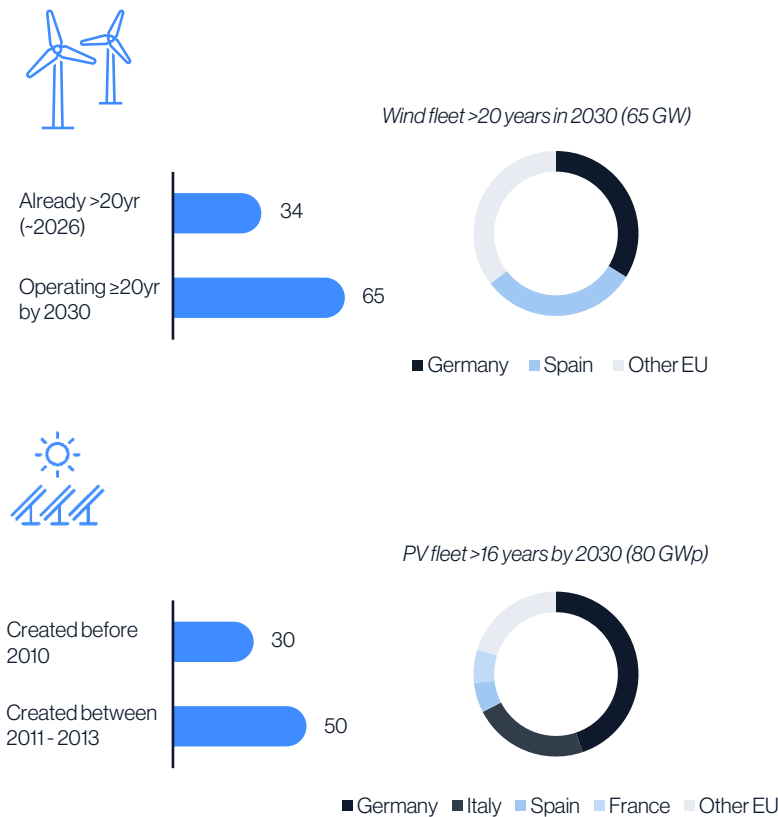
The investment opportunity (1/2)

The repowering opportunity is concentrated in the markets that led Europe’s first wave of renewable deployment.

Germany, Spain, Italy, and France together account for the vast majority of aging capacity across both wind and solar. Spain has the oldest average wind fleet at 14.8 years, followed by Germany at 12.0 years, the UK at 11.2 years, and France at 9.5 years. In absolute volume, Germany and Spain each have approximately 22 GW and 20 GW respectively of wind capacity older than 15 years — together accounting for over half of the repowering pipeline expected in 2026–2030. On the solar side, Germany’s boom-era PV fleet exceeds 37 GWp older than 10 years, and Italy’s Conto Energia vintage adds a further 18 GWp.

The following chart maps the total addressable capacity by country, combining wind and solar assets that have entered or are approaching the repowering window.

Figure 3: Addressable capacity summary



Industry estimates suggest that repowering will deliver approximately 16 GW of fully repowered onshore wind capacity between 2026 and 2030, equivalent to 13% of all onshore additions in that period. This total represents the annual commissioning rate roughly doubling from around 2 GW in 2025 to around 4 GW by 2030, with Germany, France, and Spain collectively accounting for more than half.

When combined with the growing solar revamping and repowering pipeline, the total addressable market runs into **10s of billions** of euros across equity and debt — one of the largest infrastructure investment opportunities in Europe over the coming decade.

Source: Eight Advisory Analysis

EightAdvisory

The investment opportunity (2/2)

Despite the scale of this opportunity, only a fraction of aging capacity is on track to be repowered by 2030.

The bottleneck is not principally economics or technology but the fundamental incompatibility of conventional financing structures with the repowering use case. The traditional project finance model relies on individual special purpose vehicles (SPVs), each carrying its own non-recourse debt facility. This approach works well for a single, discrete construction project, but breaks down when applied to a portfolio of operating assets undergoing phased repowering over multiple years. A portfolio of twenty separate non-recourse SPV loans can provide a cash flow pool across assets: an asset under construction can draw on the operating income of its neighbours, meaning the financing cost of the construction phase is borne through the diversification benefit of the broader portfolio. The result is a structurally flatter J-curve and lower all-in financing costs at same execution risk.

Figure 4: A massive repowering opportunity blocked by a financing bottleneck



Source: Eight Advisory Analysis

EightAdvisory

Bridging this structural gap – through consolidated portfolio-level financing that allows operating cash flows to support assets under construction – is the central financial challenge of the repowering wave, and the focus of this paper.



The challenge is not ambition or capital, but financial structures designed for yesterday's renewable investment models.

Thomas Gummert, Partner
Eight Advisory



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Equity Structuring for Repowering Portfolios

Two investment models for repowering (1/2)

Asset managers and fund sponsors with portfolios of aging renewable assets face a fundamental strategic decision when approaching repowering: how to balance the desire for long-term, stable yield against the potential to capture the significant value created by the repowering process itself.

This is not a binary choice, but a spectrum shaped by the investor's time horizon, risk tolerance, and return requirements. The equity structuring of repowering investments therefore begins with a critical question: the investment horizon and the target IRR (internal rate of return). This choice shapes every downstream decision – from fund structure and fee arrangements to debt architecture and exit strategy – and ultimately determines the investor profile.

Two distinct models have emerged:



Hold-and-operate investors pursue yield-oriented returns over extended time horizons, typically through continuation vehicles with fund lives of 12–17 years or more. In Eight Advisory's view, such strategies typically exhibit a J-curve during the construction phase, followed by stable cash yields once repowering is complete, targeting net IRRs of 8–12% (levered, pre-tax) – broadly comparable to or above life-extension strategies, and with materially lower execution risk than equivalent greenfield development projects.



Active portfolio managers, by contrast, seek to monetise the value uplift created by the repowering process itself: assets are acquired, repowered, and sold before the long, lower-return tail of the operating phase begins. With shorter fund lives of 8–12 years and capital-gains-weighted returns, this model targets net IRRs in the mid-teens (levered, pre-tax).

Both models benefit from a characteristic that distinguishes repowering from conventional greenfield development: where assets retain residual subsidy income from the pre-repowering period, this can provide meaningful downside protection during the transition phase. Moreover, the two approaches are not mutually exclusive. A hybrid strategy – holding the core portfolio for long-term yield while selectively disposing of assets when market conditions are favourable – can serve as an equity kicker that should be built into the fund documentation from the outset.

A note on the J-curve: the depth and duration of the J-curve in continuation vehicles is directly proportional to the share of the portfolio undergoing repowering simultaneously. A portfolio repowering **30%** of assets in a phased program produces a significantly shallower J-curve than one repowering **80%** of assets concurrently. This is a critical structural lever that fund managers must communicate clearly to LPs (Limited Partners) and that lenders must model explicitly in their debt-sizing assumptions.

Two investment models for repowering (2/2)

The Continuation Vehicle

Most closed-end infrastructure funds are designed with a 10–15 year lifecycle: acquire, optimise, exit. Repowering disrupts this model because it requires a fundamental reinvestment cycle at precisely the point where a conventional fund prepares divestments. The continuation vehicle resolves this tension — structured as a successor fund that acquires the existing portfolio at fair market value, it provides liquidity to LPs who wish to exit, continuity to those who remain, and a dedicated vehicle with the governance and capital appropriate for a multi-year repowering program.

In practice, we have observed LP rollover rates of up to **80%** in well-structured continuation vehicles where the management team has a strong track record and the repowering thesis is clearly articulated. The rollover process typically involves an independent valuation of the existing portfolio, negotiation of new fund terms (management fees, carried interest, hurdle rates, which are formally reset at rollover), and a formal election in which each LP decides whether to roll over, partially redeem, or fully exit.

The Active Portfolio Management Model

Under the active model, aging assets are acquired at depreciated valuations, repowered, and subsequently sold — either individually or as curated portfolios — once the construction phase is complete and the asset is re-established as a stabilised, operating infrastructure investment. Sale proceeds are recycled into the next tranche of acquisitions, creating a revolving capital model that maximises total value creation from a given equity base.

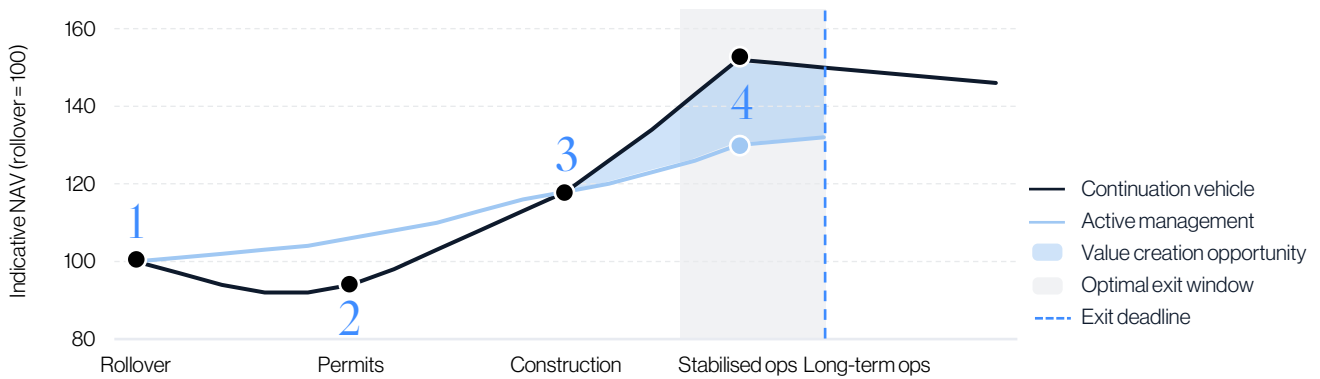
The buyer universe for repowered assets is deep and growing. At its core are long-duration yield investors — pension funds, insurance companies, and open-ended infrastructure funds — who will pay a premium for assets offering modern equipment, a long remaining useful life, and stable contracted or semi-merchant revenues. These investors typically target low-to-mid single-digit unlevered returns and require predictable, long-dated cash flows to match their liability profiles: they invest once and expect distributions over 20 years, not a quick exit.

Alongside this traditional institutional core, a newer cohort of active infrastructure capital has become increasingly prominent. Alternative asset managers are deploying significant capital into operational renewable portfolios, attracted by the combination of hard-asset backing, improving technology economics, and the ability to generate returns through operational and financial value creation rather than purely through asset appreciation. These have the mandate flexibility to participate at multiple points in the repowering cycle. The active portfolio management model accordingly favours shorter fund terms, higher target returns, and performance-weighted carried interest aligned with execution speed and exit discipline. The key risk is execution: permitting delays, construction overruns, or unfavourable market conditions at the planned exit date can compress returns materially.

Valuation dynamics across the repowering lifecycle (1/2)

A distinctive feature of repowering is that asset valuation methodology differs materially between the two investment models and is also different for investors leaving versus remaining in the transaction at rollover date. Understanding this distinction is critical for both fund managers and lenders.

Figure 5: Net Asset Value (NAV) development across repowering investment models



- 1. Common entry point**
Both vehicles acquire the asset at a single independently determined fair value at rollover
- 2. J-Curve trough**
Initially NAV dips during permitting as capex exposure is priced into the long-horizon valuation
- 3. Construction-phase rerating**
As construction progresses, continuation NAV rises steeply and crosses above active management
- 4. Value creation opportunity**
Widening gap reflects the rerating an active manager realises by selling to a continuation-type investor

Source: Eight Advisory Analysis

EightAdvisory

Valuation in Continuation Vehicles

Continuation vehicles base their Net Asset Value (NAV) on the full asset life. In the rollover transaction, all parties — exiting, rolling, and incoming investors — transact at a single, independently determined fair market value. This valuation is based on repowering NAV that incorporates the expected uplift from modernised equipment, higher capacity, and extended asset life — discounted for the execution risks inherent in construction costs, permitting timelines, technology selection, and future power prices.

As the repowering program advances — through permitting, EPC contracting (Engineering, Procurement and Construction), and ultimately construction completion — execution risk dissipates and a progressively larger share of the repowering upside is reflected in NAV. This step-up is the primary return driver for the J-curve period. During stabilised operations, NAV dynamics revert to standard infrastructure fund practice, driven by power price assumptions, discount rates, and operating performance.

Valuation dynamics across the repowering lifecycle (2/2)

Valuation in Active Management Vehicles

Exit-oriented investors approach valuation differently. At acquisition, each asset is valued primarily as an input to the repowering process: the investor underwrites an entry price against projected interim cash flows and an achievable exit value, testing whether the resulting IRR meets the fund's return hurdle. The permitting milestone represents the first major inflection point — and a potential early exit option, as permitted assets can be sold to hold-and-operate buyers at a meaningful premium over the pre-permit entry price.

Post-construction is the target exit window: the asset is a newly built, stabilised infrastructure investment, and NAV should reflect achievable transaction values benchmarked against comparable secondary market deals. If assets are not sold within the target window, fund documentation should provide for an extension period or a secondary sale mechanism to prevent the active vehicle from inadvertently becoming a long-term holder.

The key insight is that the same physical asset can carry materially different valuations at the same point in time depending on the investor's strategy, time horizon, and discount rate. This creates natural counterparty opportunities: active managers can sell repowered assets to yield-focused investors at valuations attractive to both parties — the seller capturing the construction-phase value uplift, the buyer acquiring a stabilised asset at a yield consistent with their return requirements.

“ *Active and long-term strategies complement each other, with repowering value created for exit and then sustained for yield.* ”

Thomas Gummert, Partner
Eight Advisory





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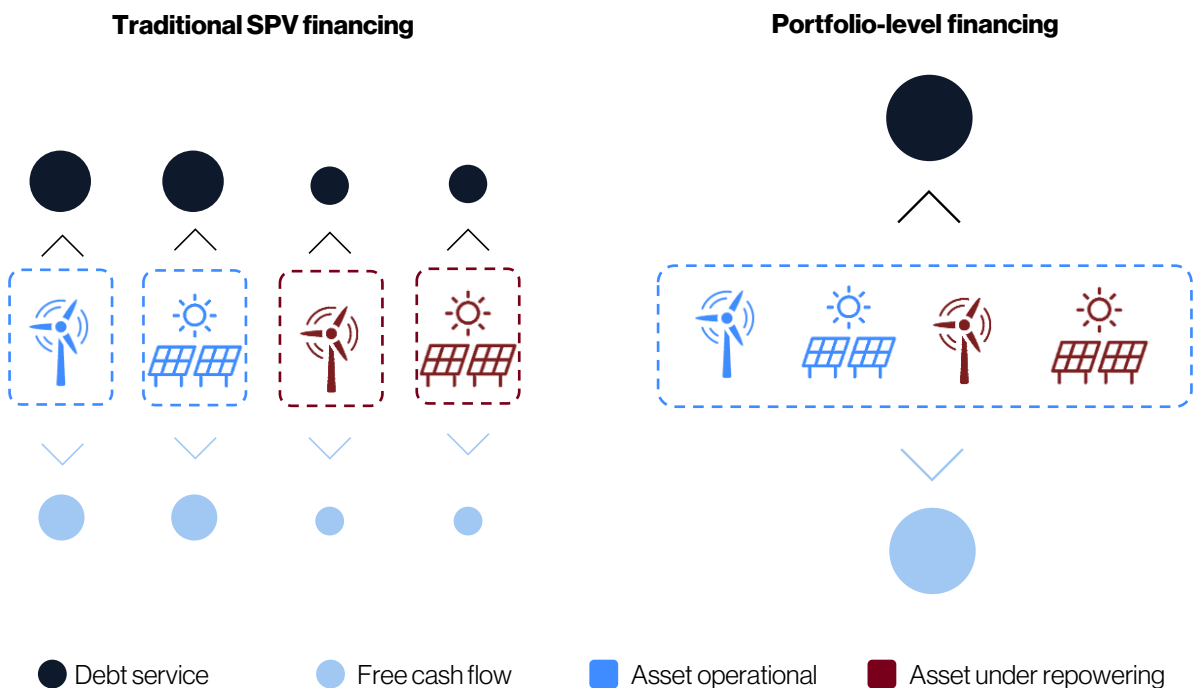
Debt Structuring for Repowering Projects

Debt structuring for repowering projects

The traditional project finance model relies on individual SPVs, each with its own non-recourse facility.

While this provides clear ring-fencing, it is poorly suited to large-scale repowering programs involving phased construction across multiple sites over several years. The alternative — and emerging best practice — is consolidated portfolio-level financing: a single facilities agreement covering the entire portfolio, with unified drawdown schedules, consolidated cash management, and portfolio-level covenants. This delivers economies of scale, the ability to cross-subsidise construction with operating cash flows, a diversified risk profile, and simplified governance.

Figure 6: From single-SPV to Portfolio-level financing



Source: Eight Advisory Analysis

EightAdvisory



Repowering assets may continue to generate cash flows, but these are often insufficient to support debt on a standalone SPV basis.

Thomas Gummert, Partner, Eight Advisory

Debt structuring for continuation vehicles

Continuation vehicles require a debt structure designed for two distinct phases: an initial construction and transition phase, followed by long-term operations.

The construction phase is typically best served by commercial bank debt, structured as a term loan with a hard mini-perm tenor of 5 to 7 years. Banks offer flexibility, drawdown mechanics, and construction risk appetite required for phased programs. Key features include delayed-draw tranches aligned to the construction timeline, cash sweep and distribution controls during the transition period, and club deal structuring with carefully selected lender groups. Operating cash flows from assets not yet repowered can service debt on assets under construction, smoothing the cash flow profile and reducing the depth of the J-curve.

Once repowering is complete, the portfolio becomes ideally suited for long-term take-out financing from institutional debt providers — insurance companies, pension funds, infrastructure debt funds — seeking predictable cash flows over 15-year to 25-year tenors. Take-out structures include private placements, green bonds, and rated infrastructure debt tranches. The transition from bank debt institutional capital is a significant driver of equity returns over the remaining asset life. This transition must be anticipated from the outset: the initial bank facility should include pre-agreed prepayment terms, make-whole mechanics, and covenant step-down triggers linked to construction completion milestones.

Debt structuring for active management vehicles

Active management vehicles require a fundamentally different debt architecture, built around shorter holding periods, asset rotation, and financing flexibility.

Whereas the continuation vehicle is built around a stable, long-held portfolio, active management vehicles must accommodate continuous asset rotation — with some assets being divested while others are still undergoing repowering. For this reason, the construction facility is often better structured as a revolving credit facility rather than a term loan. The revolving structure enables the vehicle to draw down for repowering capex and partially repay the facility as assets are sold, recycling debt capacity alongside equity capital. Facility tenors are typically shorter (3–5 years), with explicit provisions for asset disposals including security release mechanics and mandatory prepayment from sale proceeds. Margins may be higher than comparable continuation vehicle facilities, reflecting shorter commitment and greater structural complexity.

Active vehicles may also require bridge financing — short-dated facilities (6–18 months) enabling rapid acquisition of aging asset portfolios, repaid from the main facility drawdown or equity contributions. Speed of execution is a competitive advantage in this market, and bridge facilities must be pre-arranged with sufficient certainty to enable competitive bidding.

A critical structural dimension is how the facility interacts with planned asset sales: the treatment of mandatory versus voluntary prepayment from sale proceeds, minimum portfolio size covenants, the ability to substitute assets within the facility, and contingency provisions if the exit market is unfavourable. Well-structured facilities always balance the borrower's operational freedom with the lender's requirement for adequate security and debt service coverage.

Credit assessment from the lender's perspective

Continuation vehicles require a debt structure designed for two distinct phases: an initial construction and transition phase, followed by long-term operations.

For lending institutions, repowering portfolios present a hybrid risk profile — the overlay of construction risk on an operating portfolio — that does not fit neatly into either standard operating or greenfield lending frameworks. Lenders must develop bespoke credit methodologies that capture the dynamic risk profile of a portfolio moving from pre-repowering operations through construction and into post-repowering steady-state.

Key credit considerations include:



Technology risk: Performance and reliability of new equipment; OEM (Original Equipment Manufacturer) warranty coverage; track record of the selected turbine or module manufacturer; bankability of the chosen configuration.



Permitting risk: Delays or modifications during the approval process; certainty of grid connection retention and upgrade; exposure to appeals or legal challenges from third parties.



Construction risk: Cost overruns, contractor performance, weather delays; complexity of executing construction within an operating site; phasing risk across multiple concurrent sites.



Counterparty risk: Creditworthiness of PPA (Power Purchase Agreements) offtakers, EPC contractors, and OEM warranty providers; concentration risk if a single counterparty spans multiple assets.



Power price and capture price risk: Uncertainty of long-term prices beyond the hedging period; capture price dynamics and the cannibalisation effect (the tendency for high renewable penetration to depress wholesale prices during peak generation hours); basis risk between contracted and delivered prices.



Sponsor risk: Track record of the fund manager in executing repowering programs; GP (General Partner)/LP alignment; adequacy of the equity buffer relative to construction cost exposure.

For active management vehicles, lenders may also require loan-to-value covenants and minimum portfolio value tests, reflecting the exit-oriented nature of the strategy and the need to ensure adequate collateral coverage as assets are sold and recycled.



○
Case Study: Structuring
Germany's Largest
Repowering Fund

The following case study of **CYCAP's RF9 fund** illustrates how portfolio-level financing can drive repowering at scale – consolidating 45 assets across multiple predecessor funds into a single continuation vehicle with the capital structure needed to execute a multi-year repowering program. Based on publicly available information regarding CYCAP's RF9.

Eight Advisory acted as financial and tax adviser for the financing. No confidential or proprietary transaction data has been used in this case study.

Structuring Germany's largest repowering fund (1/3)

Case Study

CYCAP

Background

CYCAP, a Hamburg-based asset manager specialising in renewable energies, launched the RF9 fund at the turn of 2024/2025 as a continuation vehicle consolidating **45** European PV and onshore wind assets (17 wind farms and 28 solar parks) from three predecessor funds launched between 2008 and 2013.

The assets, spread across Germany with a small number in France, had an average age of **13** years and continued to benefit from an average of seven remaining years of government feed-in tariff income.

Equity Structuring

RF9 was structured as a 20-year Article 9 fund under SFDR (Sustainable Financial Disclosure Regulation), with a base case target IRR in the low double-digits (levered, pre-tax). The vast majority of legacy investors elected to roll over – reflecting strong confidence in both the repowering strategy and the management team.

No additional equity was required for the fund launch, as the financing structure was designed to fund the entire repowering program through debt and operational cash flows. Fund terms, including management fees, carried interest, and hurdle rate, were formally reset at rollover, consistent with market practice for continuation vehicles.



Structuring Germany's largest repowering fund (2/3)



Debt Structuring

The centrepiece was a committed portfolio-level debt facility of **€1.1 billion**, structured across five tranches (provided by an international banking club of six mandated lead arrangers):

- a construction bridge facility of €450 million,
- a term loan of €300 million,
- a letter of credit facility of €250 million,
- a VAT facility of €50 million,
- and a debt service reserve facility of €50 million

This committed facility is complemented by an accordion of up to €500 million, bringing total debt capacity up to **€1.6 billion**. This was the first time fund financing of this magnitude had been consolidated at portfolio level in the German alternative investment fund market. The facility covers all 45 portfolio assets and provides capacity for refinancing existing individual SPV loans, funding the full repowering program through **2030**, and enabling partial distributions to investors.

The consolidated approach enabled unified cash management, portfolio-level covenants, and pre-agreed due diligence frameworks with lenders, delivering significant structural and cost efficiencies relative to the legacy SPV-by-SPV approach.

Repowering Impact

Through the repowering of at least **29** sites, installed capacity is projected to increase from 457 MW to approximately **1.1 GW** – a growth of more than **140%**, representing a near-tripling of energy production at the same locations. Repowering is planned for completion between 2027 and 2030, with the portfolio remaining operational and cash-generating throughout the program.

The portfolio-level structure enables operating cash flows from non-repowering assets to provide cash flow support for assets under construction – a key structural advantage that is expected to reduce the depth and duration of the J-curve materially relative to a series of standalone SPV financings.

Structuring Germany's largest repowering fund (3/3)

The RF9 transaction demonstrates several replicable principles for the European repowering market:

1. **Continuation vehicles work at scale.** Strong LP rollover support validates the model for transitioning legacy assets into a dedicated repowering vehicle without a full exit and re-raise. The key success factors were a transparent independent valuation, formally reset fund economics, and a clearly articulated repowering thesis.

2. **Portfolio-level debt consolidation is achievable.** A €1.6bn consolidated facility demonstrates that portfolio-level financing is bankable on a significant scale and delivers material efficiencies versus the legacy SPV-by-SPV approach.

3. **Repowering is creditworthy.** Lenders are prepared to finance the construction overlay on operating portfolios, provided the structure adequately addresses phasing, cash management, cross-collateralisation, and risk allocation.

4. **Operating cash flows are a structural asset.** The ability to service debt on assets under construction with cash flows from operating assets is a key advantage of portfolio-level structures that is unavailable in standalone SPV financings.

5. **Specialist structuring advisory is critical.** The role of a dedicated financial and tax adviser is essential in bridging the requirements of equity investors, lenders, and the asset manager across a multi-dimensional process involving fund law, project finance, regulatory analysis, and power market dynamics.



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Outlook & Conclusions

Outlook and Conclusions

The repowering of Europe's first-generation renewable energy assets is not a temporary phenomenon, it is a structural, multi-decade theme that will reshape the European energy landscape and create sustained demand for sophisticated capital solutions. The convergence of aging fleet dynamics, improving technology economics, policy support under RED III, and structural electricity demand growth from electrification, hydrogen, and data centres creates a compelling investment backdrop that is likely to intensify through 2030 and beyond.

As the market matures, we anticipate the evolution of financing models beyond traditional bank debt and closed-end fund structures. Green bonds, rated infrastructure debt, and potentially securitisation of repowering portfolios represent logical next steps. The bifurcation between construction-phase commercial bank debt and stabilised-phase institutional capital is likely to deepen, creating a more liquid market for repowering risk transfer and enabling a broader range of institutional investors to access the asset class.

On the equity side, the emergence of active portfolio management strategies alongside traditional continuation vehicles is expanding the investor universe and enabling more efficient capital allocation. The ability to create value through the repowering process and to monetise it through asset rotation is a powerful additional source of returns for yield-oriented long-term infrastructure investors.

From a policy perspective, the regulatory environment is gradually improving across all major European markets. The most impactful remaining actions are the further simplification of permitting in markets such as Spain and Italy, the preservation of existing grid connections for repowered projects, and the development of auction frameworks, including CfD regimes, that appropriately value the speed and reduced planning risk of repowering over greenfield development.

Eight Advisory expects permitting activity and deal flow to accelerate further as policy uncertainty continues to resolve, particularly as Germany's record 2025 permitting pipeline translates into construction starts.

For institutional investors and lenders, the repowering wave represents a rare convergence of attractive financial returns, measurable sustainability impact, and manageable risk, if transactions are structured with the rigor and sophistication that complexity demands. Recent landmark transactions, foremost among them CYCAP's RF9 portfolio financing described in this paper, demonstrate that the required structures exist, are bankable, and can be executed at scale. The principal constraint on market development is not capital, technology, or economics, it is the availability of the structured finance expertise required to bridge the gap between opportunity and execution.



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How Eight Advisory can help

How we can support you

Repowering is one of the most structurally complex transactions in European infrastructure finance today. It requires coordinating fund law, portfolio & project finance, regulatory analysis, power market dynamics, and multi-jurisdictional tax — simultaneously.

Eight Advisory's Energy & Infrastructure team has done exactly that, acting as financial and tax adviser on Germany's largest wind and solar repowering fund. Across the key disciplines that determine whether a repowering transaction succeeds, we can help.

Whether you are an asset manager structuring a continuation vehicle, **an institutional investor** evaluating entry into the repowering market, or **a lender** assessing a portfolio-level financing request, our team brings the expertise and the transaction record to move from analysis to execution.

What we deliver:

Equity structuring & continuation vehicle design

Portfolio debt structuring & bank club syndication

Repowering financial modelling & valuation

Financial & technical due diligence

Regulatory & subsidy transition analysis

Pan-European cross-border advisory

IJGlobal
AWARDS 

**Portfolio Financing Deal of
the Year (Europe) Award**

IJGlobal Awards 2026



Brownfield is
the new Greenfield

Contact our experts and see how we can help you!



Lionnel Gérard | Partner

Global Infrastructure and
Project Finance Leader
lionnel.gerard@8advisory.com



Thomas Gummert | Partner

Infrastructure, Energy and Project Finance,
Germany
thomas.gummert@8advisory.com



Daniel Parsons | Partner

Transaction Services,
United Kingdom
daniel.parsons@8advisory.com



Erwann Huon de Kermadec | Partner

Infrastructure, Energy and Project Finance,
France
erwann.huon@8advisory.com



Martijn Van Heugten | Partner

Financial Engineering,
BeNeLux
martijn.vanheugten@8advisory.com



Gennat Mouline | Partner

Transaction Services,
Spain
gennat.mouline@8advisory.com

energy@8advisory.com

Eight Advisory is a member of

 EIGHT INTERNATIONAL

Paris
37 rue la Boétie
75008 Paris, France

Lyon
50, cours Franklin Roosevelt
69006 Lyon, France

Nantes
34 rue du Pré Gauchet
44000 Nantes, France

Rennes
28 boulevard du Colombier
35000 Rennes, France

Marseille
10 place de la Joliette
13002 Marseille, France

London
100 Pall Mall
SW1Y 5NQ London, United Kingdom

Brussels
53 Avenue des Arts
1000 Brussels, Belgium

Amsterdam
Parnassus Tower
1076 AZ Amsterdam, Netherlands

Frankfurt
Mainbuilding, Taunusanlage 15
60325 Frankfurt am Main, Germany

Hamburg
Neuer Wall 80
20354 Hamburg, Germany

Munich
Isartorplatz1, 1. OG
80331 Munich, Germany

Cologne
Rudolfplatz 3
50674 Cologne, Germany

Zurich
Gerbergasse 5
8001 Zurich, Switzerland

Milan
Via Santa Maria Fulcorina, 2
20123 Milan, Italy

Madrid
Paseo de la Castellana, 40
28046 Madrid, Spain

New York
Tower 49
12 East 49th Street
New York, NY 10017

Mumbai
Urmi axis, Seventh floor, Famous Studiolane,
Mahalaxmi, Mumbai 400 011, India

Eight International
12 rue Jean Engling
L-1466 Luxembourg

FRP
110 Cannon Street
London, EC4N 6EU, United Kingdom

JP Weber
Ul. Wspólna 70
00-687 Warsaw, Poland

JP Weber
Grodzka 9
50-137 Wroclaw, Poland

New Deal Advisors
Via Santa Maria Fulcorina
2-20123 Milan, Italy

McGrathNicol
Level 12, 44 Martin Place
Sydney NSW 2000 Australia

DH Advisory
Dubai World Trade Centre
Dubai, UAE

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For media inquiries please e-mail: marketing@8advisory.com

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