



**INDUSTRIAL
DEVELOPMENT
FUNDING**

Industrial & Digital Infrastructure Financing: Private Credit Solutions for Growth

August 2024



Table of Contents

#	Section	Page #
1	Introduction to Private Credit	1
2	Evolution of Private Credit	1
3	The Effect of Private Credit Financing on Weighted Average Cost of Capital ("WACC")	4
4	Private Credit Structures	4
5	Private Credit: Use Cases & Applicability	7
6	Private Credit Case Studies	11
7	Benefits of Private Credit	15
8	About IDF: Our Services and 100-Day Roadmap	16
9	References	19

Industrial & Digital Infrastructure Financing: Private Credit Solutions for Growth

Key Takeaways

- The 2008 financial crisis changed how the financial services industry approached investments, leading to stricter Basel III and Dodd-Frank regulations for banking entities, which resulted in greater risk aversion and lower concentration limits.
- Private credit financing fills gaps left by banks and public capital markets, allowing companies to minimize the use of costly equity, thereby lowering their weighted average cost of capital (“WACC”).
- Significant changes in energy, AI, and supply chain dynamics have necessitated newer private credit financing structures that accelerate innovation for energy transition and digital infrastructure development, and support new entrants that may not qualify for traditional bank loans.
- Private credit solutions are evolving quickly, and include Unitranche Loans / Leases, Mezzanine / Convertible Instruments, Long-Term Payment Deferrals, Build-Own-Transfer (“BOT”), and R&D and Growth Financing Royalties.
- Pension funds and life insurance companies have expanded their strategies to include private credit as a means to higher yield, providing new sources of capital that private credit managers can deploy.
- IDF is an infrastructure credit platform, offering private credit solutions in the energy, digital infrastructure, and heavy transportation sectors, enabling accelerated growth and improved working capital.

1. Introduction to Private Credit

This white paper summarizes the recent rise of the private credit sector and the uses and benefits for Original Equipment Manufacturers (“OEMs”), Engineering, Procurement, and Construction (“EPCs”) companies, and their customers (“Customers”) across multiple B2B industrial sectors that arise from new products offered by banks and non-bank institutions. Traditional financing products such as term loans, revolving credit facilities and corporate bonds offered by large financial (banking) institutions have historically served as the only financing products available to industrials to support capital expenditures. In recent years, new financing products have emerged which can supplement these existing options, expanding access to well-priced growth financing.

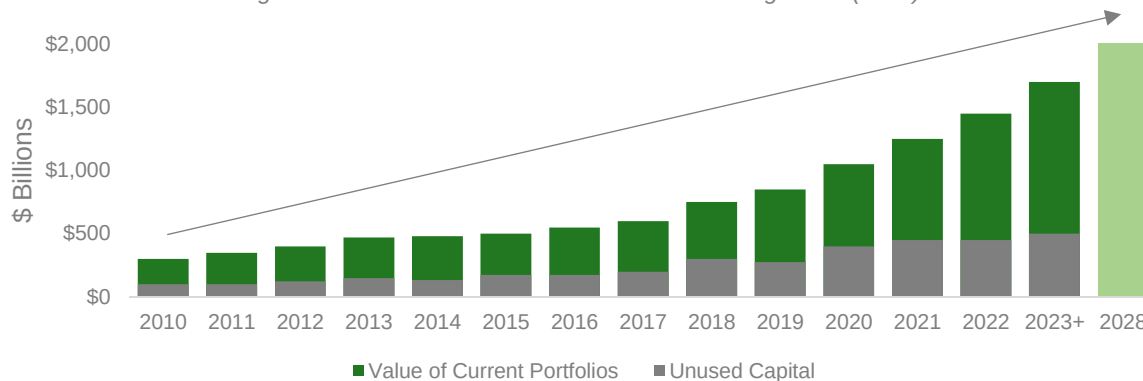
Private credit is a form of alternative credit characterized by lending where the debt is neither issued nor traded on public markets and thus is unavailable to the general public. Typically ranging from \$50 million to \$500 million, a private credit facility involves a lender directly negotiating a loan with a company in exchange for interest payments and fees. Lenders may impose covenants and/or require collateral to secure the loan.

2. Evolution of Private Credit

The private credit market has become an essential cornerstone of the financial landscape today and has experienced exponential growth in recent years. Data from the Hutchins Center on Fiscal & Monetary Policy shows that in 2008, \$375 billion was invested in the private credit market. By March 2023, private credit outstanding rose to \$1.6 trillion, an increase of 326%, with \$400 billion of “dry powder”—unused capital available for future deployment. The annual growth rate of private credit surged from 12% between 2010 and 2019 to 23% between 2020 and 2022, outpacing the growth rate in public markets. BlackRock forecasts that global private credit assets could exceed \$3.5 trillion by 2028 (See Figure 1).

So, how did the private credit industry grow so rapidly?

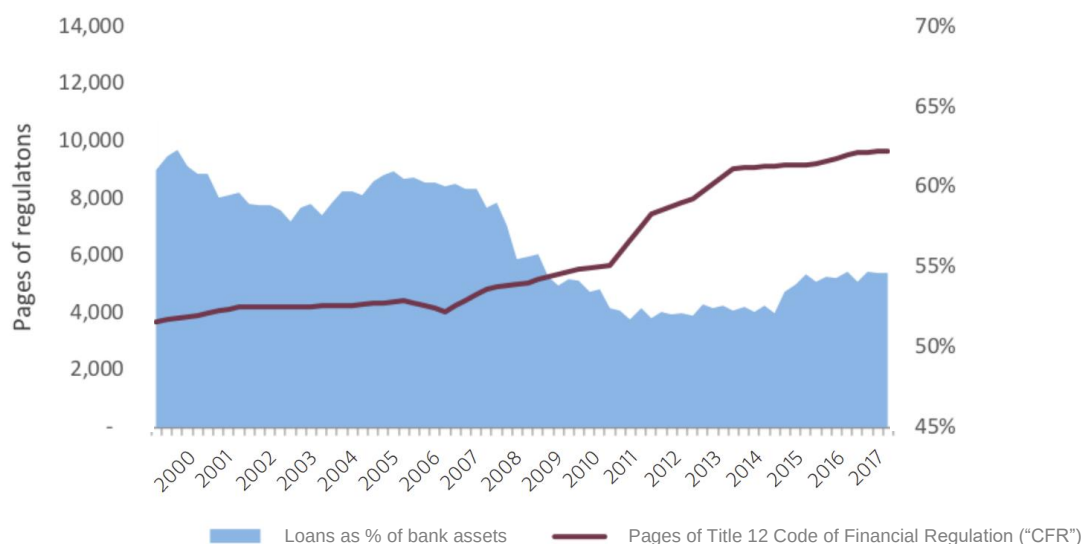
Figure 1: Global Private Debt Assets Under Management (AUM)



Source: Preqin Pro, Washington Post

The Global Financial Crisis of 2008 and its aftermath were major catalysts in the rapid growth of the private credit industry. In response to the crisis, regulators responded by introducing stricter banking regulations such as Basel III, the Dodd-Frank Act and the Volcker Rule (See Figure 2). The Dodd-Frank Act and the Volcker Rule required banks to risk-weight their assets, reducing their willingness to issue riskier loans. Similarly, Basel III, enacted in 2010, increased capital and liquidity requirements for banks, limiting their ability to extend credit. Consequently, banks became reluctant to provide direct lending to non-investment grade companies. As banks curtailed lending to smaller companies, private credit funds emerged as a vital source of capital, offering tailored solutions and faster access to funding, filling the gap left by traditional lenders.

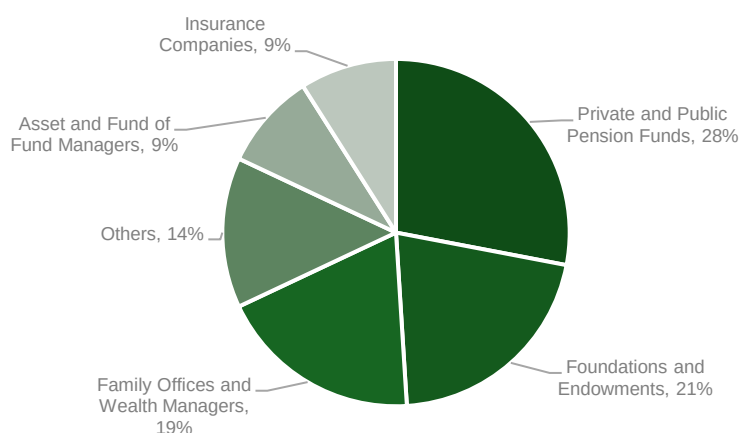
Figure 2: Relationship Between Bank Regulations and Bank Loans



Source: Rice University Baker Institute for Public Policy

Additionally, the post-crisis near-zero interest rates drove investors with longer investment horizons, such as pension funds, foundations, endowments, and insurance companies, to seek higher yields beyond traditional fixed-income options. Private credit funds met this demand by offering specialized investments in different sectors and risk profiles. They could take longer duration risks, handle subordination risk, and write large checks quickly—capabilities that traditional banks often lacked. The low yields in public debt markets also drove these investors to trade the illiquidity of private credit for better returns. By 2022, pension funds, foundations, endowments, and insurance companies collectively accounted for over half of U.S. private credit fund investments (See Figure 3).

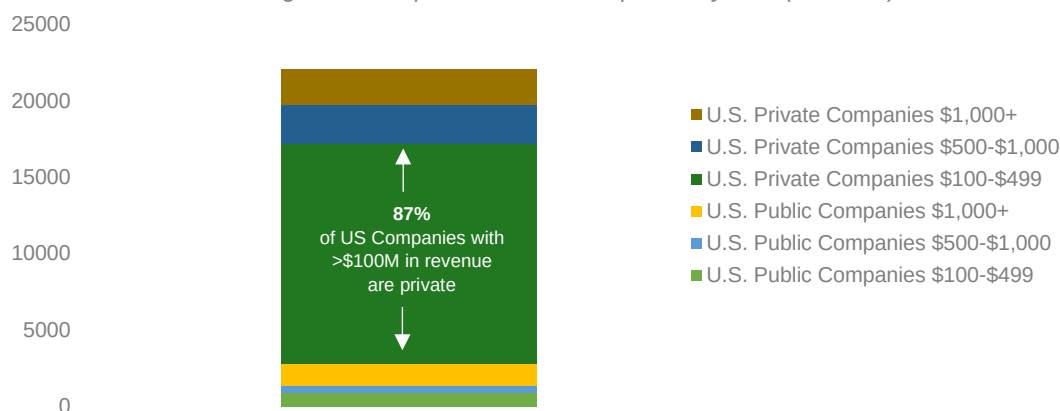
Figure 3: Lenders in US Private Credit Funds



Source: Brookings Hutchins Center on Fiscal and Monetary Policy

Private credit funds became particularly crucial for emerging market trends like energy transition, AI, and supply chain issues in heavy transportation, where companies could not necessarily meet traditional lending requirements. While publicly traded instruments generally had lower rates, they came with drawbacks such as longer time to market, high volatility, sensitivity to ratings, high costs of issuance, ongoing compliance costs, and complex disclosure obligations. They were also often unsuitable for financing specific projects or acquisitions. Only 13% of U.S. companies with annual revenues over \$100 million are publicly traded and the number of publicly listed companies has declined by more than 50% from 1996 to 2023 (See Figure 4). Private credit has therefore become more essential for the growth and sustainability of private companies. It enables them to focus on long-term strategies without the burden of public market requirements and cumbersome lending processes.

Figure 4: Composition of US Companies by Size (Revenue)



Source: Advisorpedia

Data analytics and online platforms have also streamlined deal origination and due diligence, making private credit more accessible to a wider range of lenders. Business Development Companies ("BDCs") offer individual lenders the ability to participate in lending to small to mid-sized companies. BDCs pool and invest money from lenders, who own shares representing a pro rata part of the BDC. Many BDCs are publicly traded companies. As of 2024, IMF data shows that BDCs account for approximately 14% of the private credit market.

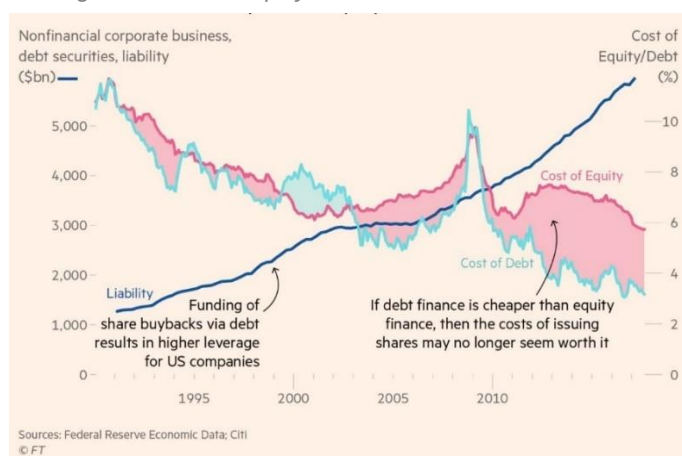
Private credit funds have emerged recently due to volatility in public credit markets and due to stricter bank regulations, gaining market share and driving significant growth in the private credit sector. The future of private credit looks promising, driven by changes in regulations, market dynamics, and innovative financing solutions that will collectively create a fertile ground for its continued growth and evolution. It is anticipated that Basel IV, expected

in 2025, will further tighten banking regulations, potentially opening more opportunities for private credit. As public markets and traditional banks face increasing constraints, private credit funds will be well-positioned to capitalize on these opportunities, driving the sector's expansion and influence in the global financial landscape.

3. The Effect of Private Credit on Weighted Average Cost of Capital ("WACC")

Companies generally evaluate their cost of funding in terms of their WACC, which represents their average after-tax cost of capital from all sources, including common stock, preferred stock, bonds, and other debt (or credit) instruments. Private credit financing can be an effective way to reduce the cost of capital associated with a project, due to the lower cost of debt financing compared to equity financing. The Financial Times compiled Federal Reserve Economic Data on the cost of equity and cost of debt over time. This comparison shows that in the aftermath of the financial crisis, the gap between the cost of equity and the cost of debt has increased, with the cost of debt decreasing to all-time lows (See Figure 5).

Figure 5: Cost of Equity vs Cost of Debt Over the Years



Source: Financial Times

In recent years, due to rising interest rates, the cost of debt (or credit) has increased from the all-time lows seen in the late 2010s. Even with this recent increase, the gap between the cost of equity and the cost of debt remains. By providing an alternative source of funding, private credit enables companies to lower their WACC by expanding debt and replacing higher-cost equity, particularly for those with capital needs unmet by banks and capital markets. Unlike traditional financing options, private credit offers more flexible terms and customized solutions, making it a strategic choice for optimizing capital structure. Private credit becomes an attractive alternative by balancing cost and risk while maintaining financial agility.

4. Private Credit Structures

Private credit includes a diverse array of financing solutions designed to meet the specific needs of borrowers, providing essential financial flexibility for managing large-scale projects. Private credit enables industrial Customers to optimize their capital allocation, enhance project financing, and maintain balance sheet health by leveraging customized structures such as unitranche loans/leases, mezzanine/convertible instruments, long-term payment deferrals, BOT arrangements, and R&D and growth financing royalties. These innovative solutions address gaps in traditional financing, support product development, facilitate inventory financing, and ensure the seamless execution of construction projects. Lastly, from an accounting perspective, some of these structures have the added benefit of being recorded as an off-balance sheet contingent liability or a vendor payable for the borrower because of the structuring of the private credit instrument. The following table outlines the key financing structures available through private credit and their respective benefits:

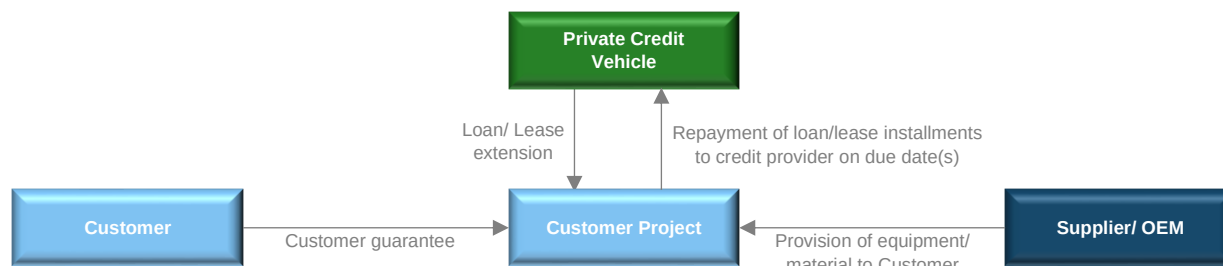
Table 1: Private Credit Structures

Product	Description	Customer Benefits	Collateral
1 Unitranche Loans / Leases	Long-term hybrid capital financing solution with fixed payment schedules and defined terms	Simplification of structure and repayments, cheapest form of leverage, faster execution	May include: • Unsecured Parent Guarantee • Residual Guarantees • First / Second Liens • Letters of Credit / Payment Bonds • Export Credit Agency Guarantees • Revenue Guarantees
2 Mezzanine / Convertible Instruments	Junior debt capital solution used to augment senior secured and equity funding	Decrease in cost of capital relative to expensive equity financing, reduction in equity dilution, increase in leverage	
3 Long-Term Payment Deferrals	Deferred financing solution for asset purchases with off-balance sheet treatment for OEMs, extended payments to project completion or beyond	Reduction in immediate capital expenditure, low balance sheet impact, increase in opportunity for growth reinvestment, low risk	
4 Build Own Transfer ("BOT")	Deferred payments solution during construction with project acquisition from third party upon construction completion	Reduction in capital needs during construction, de-risking of construction period via deferred payments	
5 R&D and Growth Financing Royalties	Financing solution for new R&D / product development on long life cycle with royalty payments on the completed project	Increase in liquidity upfront enabling acceleration of critical products, transfer of investment risk to third party, retention of ownership of IP	

4.1 Unitranche Loans / Leases

Unitranche loans / leases are a form of private credit financing that combine senior and subordinated debt into a single loan structure with a senior secured collateral. Similar to traditional loans and leases, these loans provide fixed payment schedules and defined terms but are subordinate to senior debt obligations. Loans lead to asset ownership at the end of the repayment period, while this is not necessarily true in case of leases.

Figure 6: Structure of Unitranche Loans / Leases



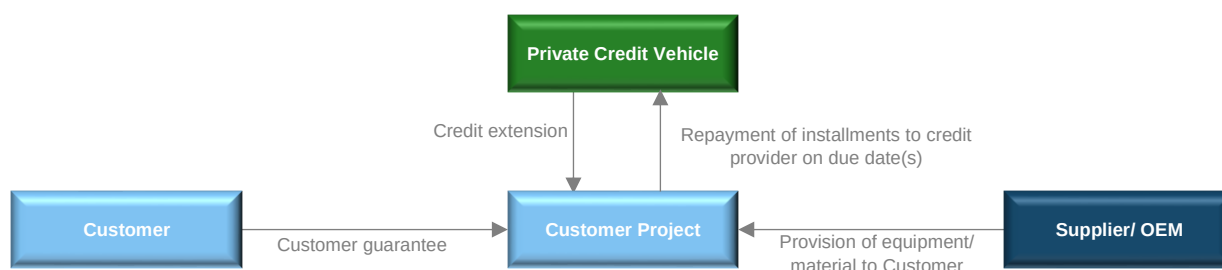
4.2 Mezzanine / Convertible Instruments

Mezzanine financing is a tranche of private credit financing that is offered to a borrower with a junior collateral position to the senior secured lenders but is senior to equity holders. It is more expensive than traditional debt but cheaper and less dilutive than equity. It serves companies whose capital needs cannot be met solely by traditional

bank loans. Early-stage companies or startups that cannot secure bank loans can also use mezzanine financing for expansion. Higher-yield products, such as mezzanine and preferred equity solutions, provide an alternative to equity funding, allowing Customers to scale and grow their businesses while achieving higher returns and lowering their weighted average cost of capital.

Convertible preferred equity is a debt-like hybrid security that can be converted into common stock at a fixed ratio. It functions like a bond, paying a fixed dividend until the shareholder converts it into common stock of the same company. It allows companies to raise capital without immediately diluting common shareholders and maintain the senior debt-to-equity ratio.

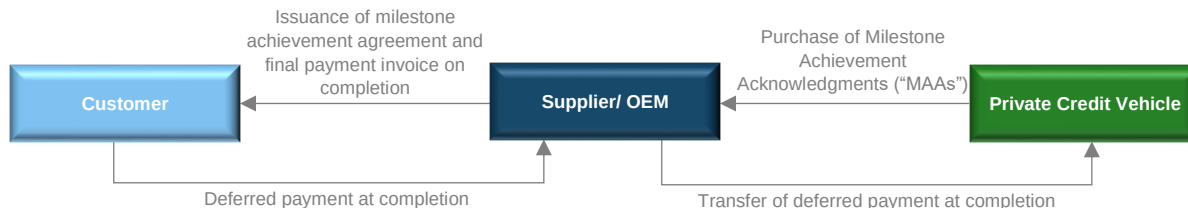
Figure 7: Structure of Mezzanine / Convertible Instruments



4.3 Long-Term Payment Deferrals

Long-term payment deferrals are payment plans related to construction and capex purchases that are generally supported by unsecured parent guarantees and potential mechanics liens. Private credit providers may offer solutions that allow Customers to extend milestone payments through non-debt arrangements, resulting in either a single payment at construction completion or a payment plan that extends beyond construction completion. OEMs and EPCs view this as a differentiator relative to peers who do not utilize these financing tools, enabling them to win more business or accelerate Customer purchases.

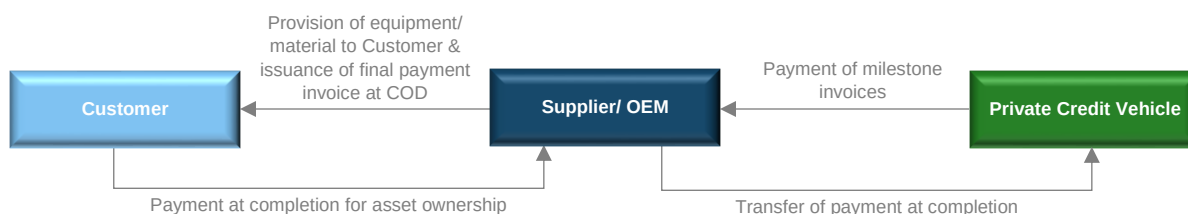
Figure 8: Structure of Long-Term Payment Deferrals



4.4 Build-Own-Transfer ("BOT")

BOT is an extension of the Long-Term Payment Deferral solution that allows Customers to benefit from the option to defer all capital expenditures and asset ownership until construction is fully completed. This allows the Customer to de-risk their construction profile and reduce capital needs during asset construction while maintaining the schedule and cost for the buyer. Similar to long-term payment deferrals, this can be used as a differentiator for OEMs and EPCs to win more business or accelerate Customer purchases.

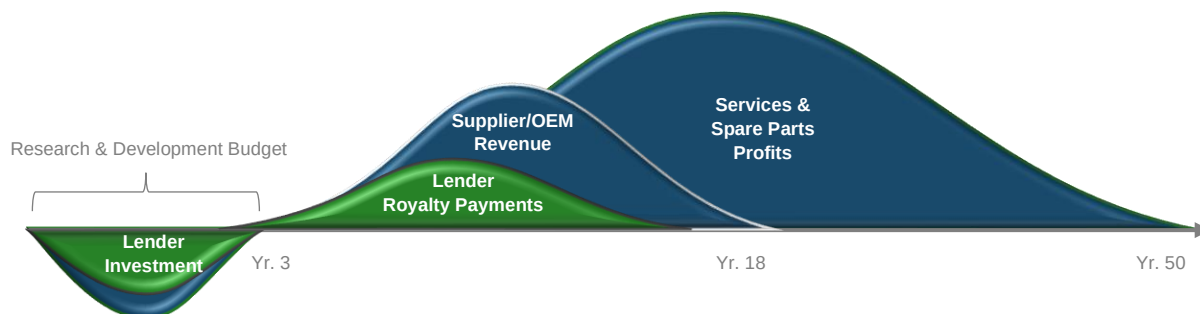
Figure 9: Structure of Build-Own-Transfer



4.5 R&D and Growth Financing Royalties

R&D and growth financing royalties are structures that enable companies to finance or co-fund direct product engineering and capital expenditures on long life cycle with royalty payments on the completed project. This transfers the investment risk to a third party, thereby increasing upfront liquidity. This approach allows large equipment manufacturers to better manage the high upfront costs associated with long product research and life cycles. In this type of structure, lender's exposure is tied to development expenses, with royalty payment dilution in the event of cost overruns and is linked to the commercial success and timing of the project. This approach offers a potential P&L offset for development expenses. This co-investment can occur in industrial derivative products using either Joint Venture ("JV") or Contract Structure methodologies. R&D royalties have been used extensively in sectors like pharma, tech, and real estate, and are now expanding rapidly to being used in industrial equipment.

Figure 10: Structure of R&D and Growth Financing Royalties



5. Use Cases and Applicability

5.1 Infrastructure and Private Credit

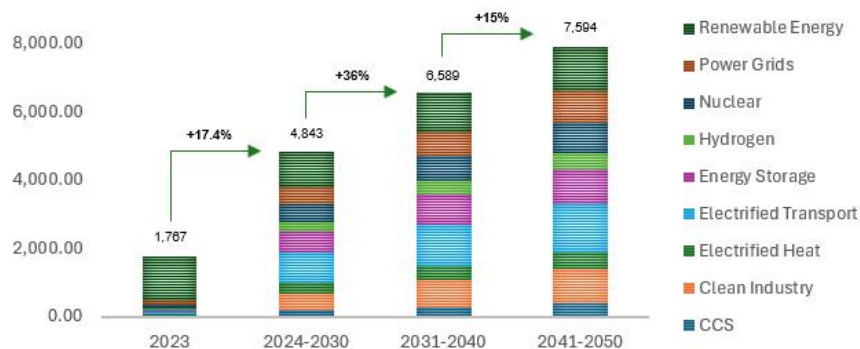
While banks have been the primary source of debt capital in infrastructure and energy, non-bank lending has grown drastically in the past decade. Traditionally, heavy equipment is paid for by Customers via a milestone payment schedule tied to the completion of specific work-related achievements. These payments are typically made from the beginning of construction through its completion. However, Customers are often limited in their flexibility to make payments as industrials are usually unwilling to heavily modify payment schedules or provide long-term on-balance sheet financing.

From 2011 to 2023, the percentage of non-bank lenders participating in infrastructure debt transactions has grown from 4% to 31%. Specifically, regarding decarbonization and emerging clean technology, private credit has been a key enabler of these sectors, which could be considered too niche or too high-risk for traditional lending. Private credit can also extend beyond sectors such as wind and solar to support broader infrastructure development, including network resilience, electrification of residential heating and "greening" of existing energy assets via coal-to-gas and gas-to-hydrogen conversions and carbon capture. Lastly, the private credit lenders have been able to

partner in Public-Private-Partnerships (“PPP”) with the Department of Energy Loan Program (“DOE LP”) to provide attractive private credit financing for newer clean technologies or “greening” of existing infrastructure assets. This is available to both the investor owned utilities (“IOU”) and independent power producers (“IPPs”).

In 2023, global investments in the energy transition reached \$1.8 trillion. Bloomberg New Energy Finance (“BNEF”) estimates that this number will reach \$4.8 trillion by 2030 and \$6.6 trillion by 2040. With the amount of capital required (See Figure 11) and the number of innovative technologies driving the energy transition with involvement of smaller non-investment grade players, private credit will play a major role.

Figure 11: Investment Required the Energy Sector in the Coming Decades



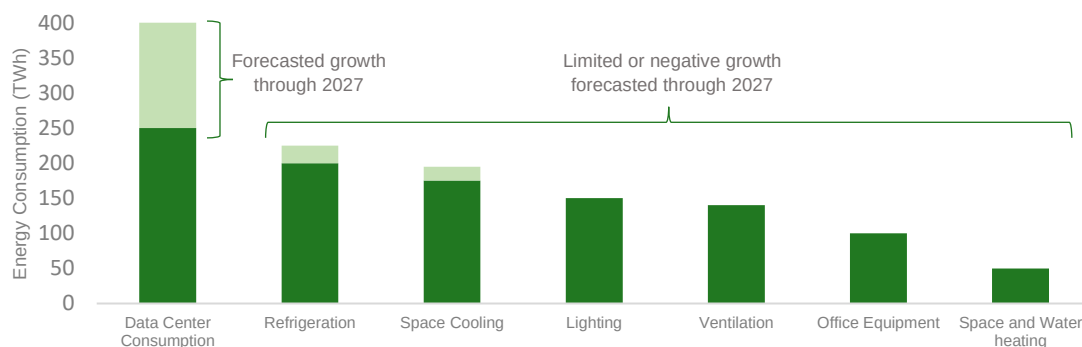
Source: LGIM

5.2 Private Credit and the Intersection between Digitization and Decarbonization

The explosive growth in data centers, driven by AI advancements and cloud service expansion, is creating a mismatch between energy demand and supply. This unprecedented need for rapid data center buildouts is resulting in a significantly increased need for capital expenditure, often straining the balance sheets of technology companies. Furthermore, the shortage of available power and transmission capacity has necessitated substantial additional capital expenditure from both the tech and power industries, on top of the significant investments already required for planned energy transitions. Utilities and power companies lack reliable funding to support this enormous increase in capital expenditures, causing significant delays in expanding data center capacity.

Peak electricity demand growth over the next five years is currently estimated to be 4.7%, nearly double what was forecasted just a year ago, with data centers being a large part of this growth. It is estimated that \$2 trillion in U.S. energy transition and data center investments will be made through 2030. According to KKR, data centers could account for 7-10% of total electricity demand by 2027, compared to 2-3% in 2022 (See Figure 12).

Figure 12: 2022 vs. 2027 Data Center Power Consumption vs. Other Major Commercial Load

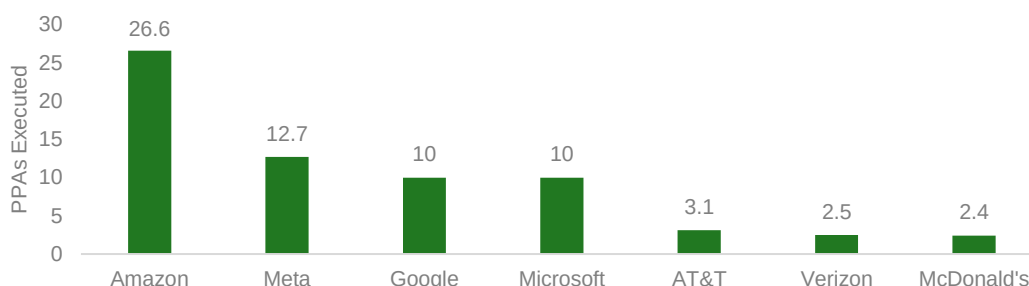


Source: Ares Infrastructure Opportunities

These energy demands come at a time when many large technology companies, such as Amazon, Google, and Meta, are focusing on decarbonizing their businesses. These companies are leaders in the drive towards net-zero

carbon, with Google and Meta pledging to be net-zero within their operations by 2030, and Amazon by 2040. As these tech giants seek to power their growing data centers and AI platforms, much of the energy demand is met with a preference for renewable energy to support corporate sustainability initiatives. Consequently, these major technology companies have become some of the biggest users of virtual Power Purchase Agreements (PPAs), financial instruments that allow them to purchase a project's renewable energy at a pre-agreed fixed price (See Figure 13).

Figure 13: Largest Global Off Takers by GW



Source: Ares Infrastructure Opportunities

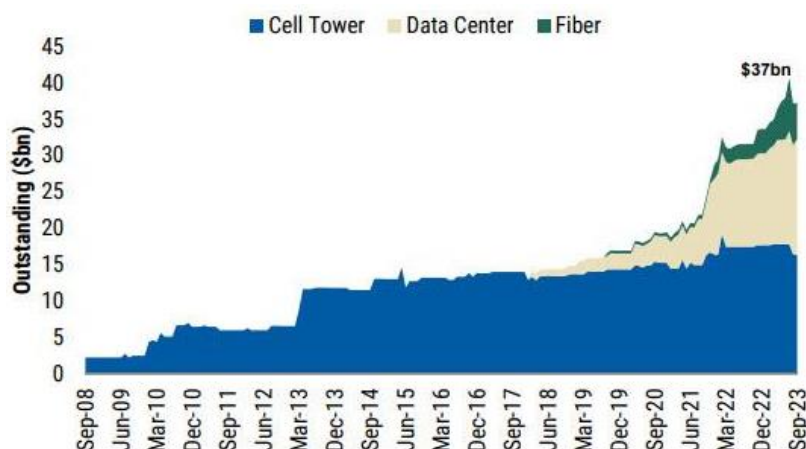
The surge in AI particularly has driven an urgent need to redefine our digital infrastructure to support, train, and run generative AI models. GenAI demands significantly greater processing power, which in turn necessitates increased electricity consumption. According to Goldman Sachs analysts, a single ChatGPT text search consumes ten times the power of a Google search, while generating an image using a GenAI model could consume as much energy as half a smartphone charge. In response, data center operators are planning and constructing an increasing number of facilities with capacities ranging from 200 to 500 megawatts (MW).

With the increasing need for GPU power, cloud service providers are seeking larger financing solutions beyond traditional asset leasing structures for building the required digital infrastructure. Conventional lease financing typically offers limited sizing, shorter terms, and uncertainties around residual payments, including buyout clauses tied to fair market value at the lease's end. This approach is insufficient due to the immense capital investment required with long-term commitments and the involvement of key players and companies that might not have the required creditworthiness.

Thus, the primary focus of private credit in this convergence is on power generation projects to support these data centers. Some private credit providers have also found that financing needs can extend further within the data centers themselves. GPU financing, inventory financing, and working capital facilities to promote access to equipment are among the specialized financing capabilities that private credit providers can offer to support this growth within the digital infrastructure sector.

Financing for AI infrastructure, particularly data centers, will not come from corporate credit markets alone. These data centers can either be owned by the companies using them or by data center operators who lease space to these companies. The infrastructure itself, along with tenant lease payments, can serve as collateral to access securitization markets—a trend already gaining traction. The first data center asset-backed security (ABS) was issued in 2018, and the market has since grown to over \$20 billion and is poised for continued rapid expansion (See Figure 14).

Figure 14: Digital Infrastructure ABS Market Size



Source: Zero Hedge

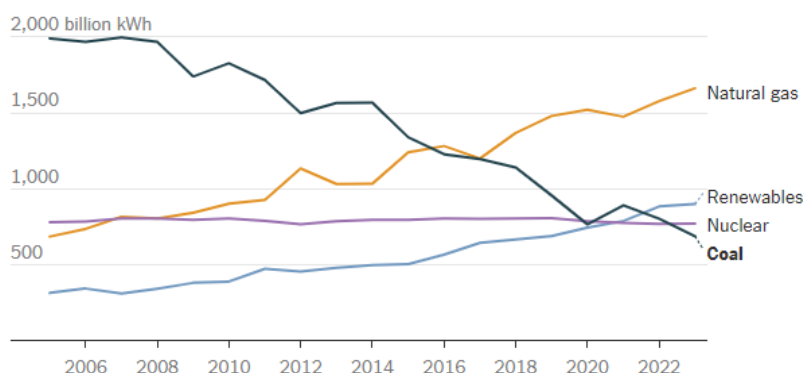
Higher base rates, the shift from banks to private lenders, and the proliferation of strategies to access private credit allow the market to continue growing. Private investment-grade strategies like asset-backed finance and infrastructure credit are compelling in today's market. The size of the asset-based finance market is about \$5 trillion to \$10 trillion. Private credit providers have executed Memorandums of Understanding ("MOUs") with leading industrials to offer a "Private-ABS" solution for Customers that secure investment-grade contracts. This solution allows for lower-cost financing due to the creditworthiness of the cloud service provider's off-take and is viewed as a competitive financing solution relative to bank ABS. The Private-ABS solution offers a fast-tracked private placement into the ABS market, with debt cash flows supported by a take-or-pay contract and can be achieved directly with a traditional financial institution. However, private credit's unique positioning with top industrials globally has enabled a pre-wired ABS facility, which can provide a cloud service provider financing at the point of equipment purchase.

5.3 Private Credit and ESG

While there is significant focus on renewable energy to support the energy transition, an emerging area of attention is the enhancement of existing assets to support decarbonization. In a LinkedIn article, Bill Newsom, President and CEO of Mitsubishi Power Americas, describes a "blueprint for decarbonization that will propel the necessary change at the required pace while being responsibly economic". The three strategies are: (1) Decarbonizing our existing infrastructure, (2) Developing hydrogen ecosystems, and (3) Developing carbon ecosystems. Elaborating further, Newsom states, "In the near term, power generators can continue to replace coal with natural gas and renewable energy and add renewable energy storage like hydrogen".

In accordance with the key strategy of decarbonizing existing infrastructure, private credit has been a key driver of financing the conversion of coal power plants to use natural gas. According to the EIA, in 2019, coal-fired generation produced 2,257 pounds of CO₂ per megawatt hour ("MWh") of electricity, while natural gas-fired generation produced less than half of that, with 976 pounds of CO₂/MWh. This stark difference in emissions can be attributed to the carbon content of the fuels themselves and the efficiency of the power generation process, where natural gas-fired generators require less energy input than coal-fired generators. CO₂ emissions declined by 819 million metric tons from 2005 to 2019, with 65% of that decline attributable to a shift from coal to natural gas (See Figure 15).

Figure 15: US Electricity Generation by Source



Source: New York Times

Natural gas has proven to be a more beneficial energy source compared to coal. According to the U.S. Energy Information Administration (“EIA”), burning natural gas for energy results in significantly fewer emissions of nearly all types of air pollutants and carbon dioxide (CO₂) compared to coal. For every 1 million British thermal units (“Btu”) of energy produced, burning coal generates over 200 pounds of CO₂, while natural gas produces only about 117 pounds of CO₂. This significant reduction in emissions is due to the cleaner-burning properties of natural gas. Furthermore, natural gas power plants are more efficient than coal plants, requiring less fuel to generate the same amount of energy and thereby further reducing overall emissions. Such significant differences in carbon emissions and efficiencies have called for a rapid energy transition from coal to natural gas.

Data from the New York Times shows that in 2023, coal generation reached its lowest level in half a century, contributing to a total greenhouse gas emissions reduction of 1.9% for the U.S. A primary reason for this reduction was that emissions from power plants dropped by approximately 8%, largely due to the closing of coal plants and their replacement with higher-efficiency natural gas plants and renewables. While coal reached its lowest levels, natural gas usage soared to its highest levels. As utility companies seek to pivot away from coal and embrace natural gas as the backbone of their energy production, coal-to-gas conversion continues to present an attractive opportunity.

As the energy transition continues, private credit providers have committed to provide financing to enable the required energy transition and achieve progress on global initiatives such as the U.N. Sustainable Development Goals (SDGs) and COP28. These goals will be critical to ensuring the success of the energy transition.

Aligning with U.N. Sustainable Development & COP28 Goals



6. Private Credit Case Studies

6.1 New Product Buildout – Senior and Mezzanine Loans Case Study

Private credit plays a pivotal role in the power industry, particularly for IPPs who operate outside the traditional utility grid and lack the benefit of a regulated rate base. Utilities rely on their rate base—a measure encompassing all capital investments related to constructing power assets—to earn a regulated rate of return. This rate base can

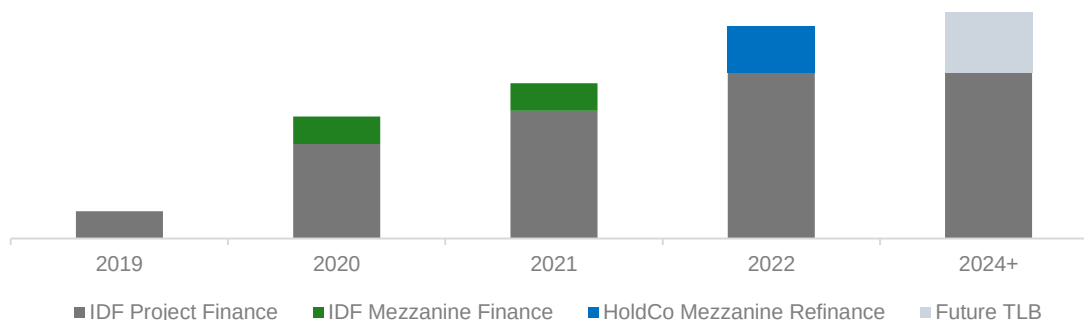
include accumulated interest and financing charges, providing an accretive solution for project owners. Capital expenditures are typically scheduled until an asset becomes operational, and private credit providers offer financing solutions that cover construction costs even beyond this operational date.

In contrast, IPPs must compete by offering superior services and prices to consumers or utilities without the backing of a rate base guarantee. Consequently, IPPs often turn to private credit to lower their cost of capital, through replacing equity with senior or mezzanine loan financing

One illustrative example of the impact of private credit in this sector is the engagement of IDF by an IPP that transitioned from being a global EPC and provider of refurbished GE aeroderivative turbines to an owner and operator of power assets. The IPP engaged an infrastructure credit provider, successfully closing a \$177 million senior secured plant finance at over 90% LTV. From 2020 to 2022, the infrastructure credit provider facilitated five more senior secured plant financings and executed a mezzanine HoldCo debt raise. This strategic financing has positioned the platform for a Term Loan B issuance and continuous cash flow generation, allowing reinvestment in operations and dividends to shareholders.

Cashflow Summary:

Figure 16: IDF & IPP Historical Funding Partnership Cashflow Summary



Key Collateral:

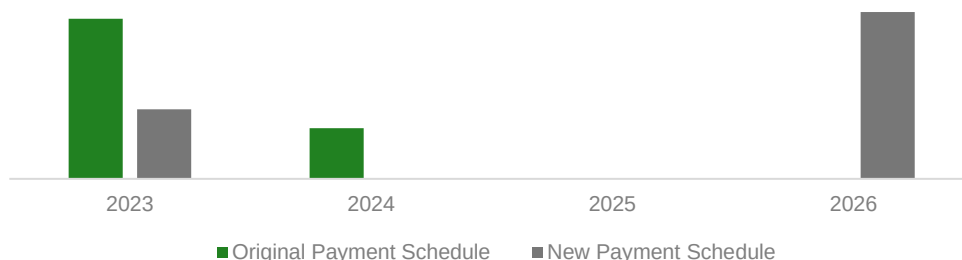
- Security over projects during senior debt financing term
- Junior claim on multiple assets via mezzanine financing
- Investment-grade power purchase agreements to support ongoing cashflow generation and debt obligation coverage
- 3rd party warranties and performance guarantees

Key Highlights:

- Financed over 2.3GW of power generation buildout
- Financed first 1.5GW with combination of mezzanine and senior secured financing
- Achieved high Loan to Value (LTV) levels leveraging private credit ability to focus on refurbished turbine cash flow generation versus traditional loan to value metrics

6.2. Utility Construction Bridge – Long-Term Payment Deferrals Case Study

Private credit providers have collaborated with public companies and utilities to bridge funding requirements during asset construction periods. One example of this is IDF's collaboration with a Global OEM to provide \$210 million deferral of milestone payments over 3.5 years, resulting in one single invoice issued to the Utility at completion of the project in 2026

Cashflow Summary:*Figure 17: Utility Construction Bridge Cashflow Summary***Key Collateral:**

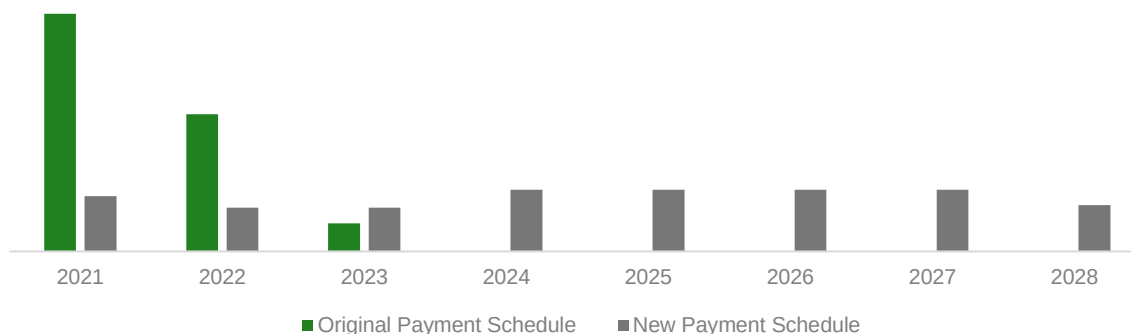
- Investment grade rated counterparty
- No performance setoffs or other defenses against deferred payment obligations
- Industrial Customer acknowledgment via signed Milestone Achievement Acknowledgment (“MAA”) as milestones are completed, enabling off-balance sheet treatment via issuance of single invoice at project completion
- UCC filing on receivables

Key Highlights:

- Construction finance for utility sector, structured as Industrial payable
- Large-scale transaction
- Simple structure resulting in minimal incremental documentation

6.3. Coal to Gas Conversion – Long-Term Payment Deferrals Case Study

Private credit is instrumental in facilitating major infrastructure projects, particularly in sectors requiring significant capital investment for asset conversion and upgrades. Another example is the coal to gas conversion of power units, where IDF provided a long-term payment deferral program for a large public power company. This program provided a \$150 million payment deferral to be repaid with quarterly payments over five years post-completion. This innovative financing solution enabled the company to undertake a critical conversion without immediate financial strain. It also enabled the OEM to win more business by offering this structure to its public company Customers.

Cashflow Summary:*Figure 18: Coal to Gas Conversion Cashflow Summary*

Key Collateral:

- Investment grade rated industrial Customer parent counterparty
- No performance setoffs or other defenses against deferred payment obligations
- Industrial Customer acknowledgment via signed payment acknowledgment as milestones are completed
- Receivable inclusion in LTSA
- UCC filing on receivables

Key Highlights:

- Helped industrial win deal and improve pricing by financing conversion of coal to gas
- Achieved majority of provinces carbon reduction targets for entire year

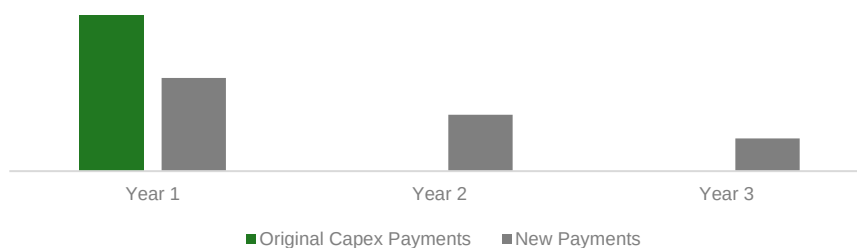
Similar financing solutions can also benefit the heavy transportation industry, where significant upfront investments are needed for new assets or upgrades, demonstrating the broad applicability of private credit in fostering operational efficiency and sustainability across various sectors.

6.4. GPU Financing – Unitranche Loans Case Study

Private credit plays a crucial role in enabling tech companies to scale by providing significant capital for equipment purchases. A notable example is a cloud company that sought financing from IDF to purchase \$248 million worth of Nvidia Graphics Processing Units (“GPUs”) from a major equipment supplier via a newly formed SPV. The financing structure included a unitranche loan across four drawdowns, with an additional amount available on an uncommitted basis. This financing facilitated the acquisition of 5,200 GPUs for a total capex of \$291 million, with 28% of the GPUs contracted with AI companies and the remaining GPUs used for on-demand customers. This was the first instance of a private credit lender taking market risk on the latest chip product offered by Nvidia without long-term Customer contracts locked in by the cloud company borrower.

Cashflow Summary:

Figure 19: GPU Financing Cashflow Summary

**Key Collateral:**

- Cloud provider unsecured parent guaranty
- GPUs allocated and warrantied by OEM / NVIDIA
- ~30% of GPUs contracted by AI companies
- Pledged collateral of OEM H100 systems, ancillary equipment, licenses, and warranties to the SPV

Key Highlights:

- Enabled the cloud company to purchase critical GPU infrastructure without immediate financial strain, facilitating a one-stop shop for equipment and financing with NVIDIA as a strategic partner
- Structured financing allowed for predictable cashflow management
- Provided the cloud company with scalable capital for both on-demand and contracted business profiles

Similar financing solutions can benefit other tech companies looking to scale their infrastructure rapidly, demonstrating the broad applicability of private credit in fostering growth and operational efficiency across various sectors.

7. Benefits of Private Credit

Private credit has emerged as a powerful alternative to traditional bank financing, providing essential capital for businesses navigating regulatory constraints and market complexities. As banks face tighter regulations and increased risk aversion, private credit steps in with flexible, tailored solutions. This financial innovation bridges the funding gap left by conventional lenders and drives growth, innovation, and sustainability. Moreover, private credit can complement traditional fixed income strategies, offering incremental income generation, potential resilience, return enhancement, and diversification. Some of the benefits of using private credit are listed below:

- Increases and accelerates industrials access to debt financing, incremental to bank appetite, which is constrained by regulation and slower processes.
- Provides lower cost of funding relative to the expensive equity financing, improving the overall WACC.
- Provides customized solutions for project needs, allowing for delayed draws, and cash pay at completion, optimizing capital costs and balance sheet metrics.
- Creates alternative funding options for major upgrades and overhauls while optimizing capital costs and balance sheet metrics.
- Creates sales financing differentiation for industrial OEMs and EPCs relative to its competitors.
- Enables innovation in energy transition, digital transformation and infrastructure development and enables improved performance on ESG metrics, providing funding to critical companies that may not qualify for bigger traditional bank loans.

8. Why IDF?

Background:

IDF is an infrastructure private credit platform that provides structured financing in the Energy Transition, Digital Infrastructure and Heavy Transportation and sectors. IDF has committed ~\$2.3Bn+ of growth capital in the last ~3 years to multiple industrials and their Customers, providing innovative capital solutions beyond traditional financing options. IDF is uniquely positioned to provide a one-stop shop financing option alongside OEMs and EPCs sales, significantly reducing project complexity, as opposed to managing numerous creditors.

IDF has financed the buildout of 2GW+ of power generation for a variety of different project developers, including Utilities and IPPs, and recently closed a groundbreaking \$500 million financing for a Digital Infrastructure company to support the buildout of a cloud service platform using Nvidia GPUs.

IDF provides attractively priced captive off-balance-sheet sales and product funding solutions to global industrial companies. IDF invests in projects by providing non-recourse, off balance sheet investments in exchange for a portion of the project's future cash flows. IDF's programs facilitate expanded industrial product sales, are attractively priced for the risk shared, and improves the project NPV and IRR profile.

Problems IDF Solves:

IDF helps borrowers to address key problems facing their organizations. Whether that is incremental capex financing that surpasses bank appetite or expanding working capital needs due to rising interest rates and supply chain costs, IDF has experience and solutions for industrials and their Customers. Other issues that IDF can help address include:

- Industrial Customer balance sheet and budget constraints delaying project approvals and capex spend
- Need to convert existing assets to innovative technologies (e.g. coal to gas, gas to H2)
- Limited industrial budget for R&D expense

Financing Solutions:

Through its past work with Industrials and their Customers, IDF has identified three main financing solutions that can help organizations address the key problems facing them today and in the future: new construction / capex delayed draw funding, major overhauls / upgrades delayed draw funding, and working capital financing (deposits, inventory). IDF has the flexibility to offer five major product structures for industrials and their Customers including:

1. Unitranche Loans / Leases
2. Mezzanine / Convertible Instruments
3. Long-Term Payment Deferrals
4. BOT
5. R&D and Growth Financing Royalties

IDF Strike Zone:

IDF offers flexible financing solutions and structures in the following categories:

- **Use of Proceeds:** Construction and/or asset upgrades / conversions
- **Ticket Size:** Up to \$1Bn or more
- **Geographies:** OECD countries
- **Tenor:** 2 – 25-year term
- **Collateral:** Asset unsecured or secured
- **Timing:** Early engagement at technical selection

Funding Partnerships:

IDF's funding strategy is to have a broad set of funding partnerships that allow a customized / blended financing of industrial and digital infrastructure financing needs, with the ability to scale rapidly with the financing needs of counterparties. IDF is SEC registered and has a diverse pool of funding partnerships with Qualified Institutional Buyers ("QIBs"), including mega private credit funds, global project finance capital pools, pension funds, and insurance asset managers.

IDF's ESG Mission:

IDF is aligned with the United Nations SDG's and COP28, and its mission is to enable global energy transition and sustainable development initiatives in partnership with leading global industrial and financial partners. IDF has been able to accelerate deployment of key sustainable technologies, such as battery storage, and strengthen supply chain to support the energy transition through its unique structured products.

8.1 IDF's 100 Day Roadmap

Stage 1: Determine if IDF's Products & Services are Relevant for You (~1 week)

"Yes" to one or more below key questions may make IDF's financing solutions applicable to your company:

- Do you sell heavy equipment to your Customers, which involve long-lead times for purchases?
- Does your equipment or services involve service agreements under which the Customer pays you for ongoing maintenance & servicing of the asset?
- Are your Customers seeking financing solutions to support their capital expenditure investments in the short term to meet their internal budgetary or cash flow targets?
- Do you have inventory balance that has significantly increasing working capital needs?

Stage 2: Introductory Discussion with IDF (~1 week)

- IDF provides structured financing solutions and meets with your finance and sales leads to discuss one-stop financing solutions, and balance sheet and profit & loss impacts to you and your Customers.

-
- IDF will provide your sales team with a bespoke presentation which details financing solutions and benefits, which can be shared with your Customers, as a differentiation of your Customer proposal.
 - IDF will serve as an “in-house” finance partner for your sales teams on how to best present innovative sales financing solutions.
 - Monthly or quarterly meetings to discuss high-level commercial pipeline opportunities where your Customers are seeking deferred payment or financing solutions on large purchases.

Stage 3: IDF Creates Sample Project-Specific Solutions (~30 Days)

- Based on high-level opportunities discussed during an introductory meeting, IDF will create presentation materials that can be used by in Customer discussions.
- Industrial to provide Customers with IDF’s financing solution, and IDF to refine structure based on Customer preferences.
- IDF is flexible to be “behind the scenes” and undisclosed to Customers; however, IDF has found it most effective when included in direct Customer discussions.
- Customer to provide confirmation of interest in industrial/IDF financing proposal.

Stage 4: Origination and Deal Execution (~30-60 Days / Ongoing)

- IDF will lead all transaction financing activities and close and fund financing facility within target timeframe.

IDF “Tear Sheet”

Industrial Development Funding (“IDF”) is an infrastructure private credit platform that provides structured financing in the Energy Transition, Digital Infrastructure and Heavy Transportation sectors. IDF is uniquely positioned to provide a one-stop shop financing option along with OEMs and EPCs sales, significantly reducing project complexity.

Sector Expertise



**Energy
Transition**



**Digital
Infrastructure**



**Heavy
Transportation**

Industrial Expertise

- Utilities, Public Companies & Independent Developers
- Original Equipment Manufacturers (“OEMs”)
- Engineering, Procurement and Construction (“EPC”) Providers
- High-Performance Compute (“HPC”) / Data Centers

Problems Addressed

- Incremental capex financing needs beyond bank capacity
- Higher interest rates & supply chain costs expanding working capital needs
- Balance sheet and budget constraints delaying project approvals
- Need to convert existing assets to new technologies (e.g. coal to gas, gas to H2)
- Limited budget for R&D expense

Financing Structures

- Unitranche Loans / Leases
- Mezzanine / Convertible Instruments
- Long-Term Payment Deferrals
- Build Own Transfer (“BOT”)
- R&D and Growth Financing Royalties

Business Solutions

- New construction / capex delayed draw funding
- Major overhauls / upgrades delayed draw funding
- Working capital (deposits, inventory)

Benefits for Industrials

- ✓ **Easy:** One-stop-shop for capex and financing solutions
- ✓ **Efficient:** Capital structure optimization via unsecured / off-balance sheet financing (improves WACC)
- ✓ **Expands Sources:** Access to incremental alternative capital sources (insurance, pensions, etc.)
- ✓ **Bridges:** Timely capital bridge with flexible refinance to rate-base or public markets

Customer Engagement Process

Early Action

Program Introduction

Win Deal

Monetize Receivables

Description

- Gauge customer interest in payment deferral
- Explain structure & key terms
- Review of ready-made FAQ pages
- Industrial finalizes customer sale
- Legal documentation review
- After customer sale and milestones completed, Industrial sells receivable to IDF for cash

Key Documents

- Initial customer 1-pager and introductory email
- Submit bid with deferral included
- Execute commercial documents with deferral included
- Financing Agreement
- Industrial-IDF collaboration agreement

IDF Deal Support

- Help confirm industrial's financing opportunities
- Join call / meeting with customer
- Submit high-level IDF proposal
- Confirm IDF proposal
- Begin due diligence & legal documentation
- Finish due diligence & legal documentation
- Execute IDF financing

IDF Strike Zone

- **Use of Proceeds:** Construction and/or asset upgrades / conversions
- **Ticket Size:** Up to \$1Bn or more
- **Geographies:** OECD countries or non-OECD countries with credit enhancement
- **Tenor:** 2 – 25-year term
- **Collateral:** Asset unsecured or secured
- **Timing:** Early engagement at technical selection

Contact Information

Headquarters:

1000 South Pointe Drive
Suite 1104
Miami Beach, FL 33139
www.indevfunding.com

References

1. IDF Website: <https://indevfunding.com/>
2. Washington Post: "How Private Credit Gives Banks a Run for Their Money" (October 2023)
3. Alliance Bernstein: "Private Credit Outlook: Evolution and Opportunity" (January 2024)
4. Wall Street Fintech: "The Definitive History of Private Credit" (February 2024)
5. Mayer Brown: "Regulatory Preparing to Finalize Basel IV" (May 2024)
6. Morgan Stanley: "Understanding Private Credit" (June 2024)
7. J.P. Morgan Private Bank: "Can private credit continue to perform?" (September 2023)
8. Blackrock: "Private credit – a main street opportunity" (April 2024)
9. Brookings: "What is private credit? Does it pose financial stability risks?" (February 2024)
10. Investor.gov: "Publicly Traded Business Development Companies (BDCs)"
11. Ares: "The Convergence of Digital Infrastructure and the Energy Transition" (June 2024)
12. Baker Institute for Public Policy: "What Caused the Post-crisis Decline in Bank Lending?" (January 2019)
13. Advisorpedia: "Number of Public Companies v. Private: U.S." (January 2024)
14. Upfina: "Cost of Debt Vs. Cost of Equity: What's Driving Markets?" (September 2017)
15. LGIM: "How private credit can drive the net zero transition" (2024)
16. KKR: "Opportunity Knocks" (June 2024)
17. EIA: "Electric power sector CO2 emissions drop as generation mix shifts from coal to natural gas" (June 2021)
18. New York Times: "U.S. Carbon Emissions Fell in 2023 as Coal Use Tumbled to New Lows" (January 2024)
19. LinkedIn: "What We Need to Stay on Track for Net Zero: An Honest Look" (April 2024)
20. Proximo: "Private credit: Is this infrastructure's new liquidity pocket?" by Tom Nelthorpe (September 2023)
21. U.S. Energy Information and Administration: "Natural gas explained: *Natural gas and the environment.*" (April 2024)
22. KKR: "Unlocking Private Credit" (December 2023)
23. British Business Bank: "What is Private Credit?" (December 2020)
24. Goldman Sachs: "Understanding Private Credit" (October 2022)
25. Alts.co: "Private Credit Investment is on the Rise" (December 2023)
26. Federal Reserve: Private Credit - Characteristics and Risks (February 2024)
27. Reuters: Data center boom reveals AI hype's physical limits (July 2024)
28. Cion Investments: "What is Private Credit?" (January 2024)
29. White & Case: Q&A explainer: "Private debt in a changing market" (January 2024)
30. Percent: "The History of Private Credit: CLOs and the Great Financial Crisis" (September 2022)
31. Mariner: "Private Credit Markets – A Growing Force" (May 2024)