

STRATEGICALLY FINANCING FUTURE SUCCESS

Financing the energy infrastructure transition

THE GLOBAL ENERGY TRANSITION IS ONE OF THE MOST SIGNIFICANT ECONOMIC AND TECHNOLOGICAL SHIFTS IN MODERN HISTORY.¹

The energy transition will require a global transformation to ensure success, including significant levels of investment and strategic financing models.

WHEN LOOKING TO FINANCE THE TRANSITION, THERE ARE THREE MAIN CHALLENGES:

1. The pace required for investment: The global energy transition demands significant capital investment within compressed timeframes. There is a shift away from incremental infrastructure development towards large-scale, transformative projects encompassing both greenfield and brownfield integrated initiatives. The challenge lies in creating financing structures that enable the staged deployment of projects while ensuring financial feasibility, operational agility, and resilience to evolving market dynamics.

2. Balancing public and private sector investment: The industry has historically been shaped by government policy, regulatory oversight and private investment. The transition will continue to require this while navigating evolving regulatory and public policy priorities. The public and private sector will likely have to work closer together and more efficiently than ever before. While government policies and incentives can de-risk projects, the private sector's efficiency and innovation should be leveraged to accelerate the transition effectively.

3. Future-proofing financing structures: The compressed timelines to build the quantum of projects required, mean a new wave of risks. Energy projects have historically required long-development timelines due to regulatory and permitting processes as well as financing opportunities. The sheer number of projects to come online paired with current heightened financial market volatility, necessitates the need for innovative financing models. Globally, many regions have

stuck to financing structures that have worked time and time again. There is now an opportunity for these regions to look at exploring innovative financing structures that may be more fit for purpose in aiding projects to meet outcomes, save time, and effort of governments and private investors.

Christopher Arroyo, associate director, Infrastructure & Real Estate, Deloitte Australia, provides a perspective on global financing approaches:

"Globally, there have been several trends developing in recent history. Some of these have included significant increases in corporate Power Purchase Agreement (PPA) activity in Europe, China expanding its Environmentally sustainable electricity Certificate (GEC) trading and South Korea and Australia increasing their use of virtual PPAs and project finance structures."

"These varied approaches have attempted to deal with projects' unique risk profiles and individual market conditions. Despite these differences, there are some common challenges financing structures will need to keep in mind."

GLOBAL OPPORTUNITIES IN ENERGY INFRASTRUCTURE FINANCING

There are several areas industry leaders should consider when developing solutions to overcome the challenges of financing the energy infrastructure transition:

1. Sizing and de-risking: The capital required for projects will likely push market boundaries on what is possible under current structures. Projects will need to consider how different financing options and structures will allow the appropriate sizing based on scale, complexity, risk and potential latent challenges.

2. Flexibility: Projects are increasingly being asked to deal with unknown factors throughout the design, procurement, development, construction and operational phases. Financing will need to be able to cater towards this including the ability to quickly ramp up and down during the procurement and delivery phases, deal with the possibility of longer than estimated procurement cycles and increased supply chain cost pressures while also maintaining an appropriate cost of funds for the risk profile encountered.

3. Certainty and availability: In an industry with so many competing investment propositions, projects require absolute certainty that they will have access to funds as they are required. Although there may be seen to be large amounts of capital available and flowing into the industry for investment as of this writing, as a larger number of projects continue to reach financial investment decision and delivery, there will be a huge increase in the competition for this capital.

4. Integration: Not only will the financing of projects need to consider the above, but they will need to do so while:

- Ensuring financing structures assist in the driving of and relevant risk sharing across transmission, distribution, generation, and storage assets.

Investors, financiers, developers, and others are uniquely poised to lead the charge in the global energy transition. As this transformation accelerates, it is imperative for these stakeholders to collaborate effectively, ensuring that financing strategies prioritize consumer needs and drive project efficiency. By aligning diverse market perspectives, we can unlock significant opportunities for innovation, making the energy transition not just a necessity but a catalyst for positive change.

Luke Houghton, Global Market Leader, Infrastructure & Real Estate, reflects on the size and breadth of the challenges, and what stakeholders need to address in their planning in the coming months and years:

"Investors, financiers and developers are uniquely positioned to lead the charge in the global energy transition. This transformation requires proactive collaboration, ensuring that financing strategies align with consumer needs and drive efficiency."

- Creating public and private finance levers that work harmoniously as projects balance meeting legislated mandates, social license and corporate returns.

SO, WHAT'S NEXT?

To unlock opportunities and drive innovation, stakeholders should:

- **Align** financing models with evolving policy and market demands.
- **Develop** adaptable, scalable financial structures that address risk, flexibility, and capital accessibility.
- **Strengthen** public-private collaboration to create investment environments that support both economic and environmental goals.

The energy transition is not just a necessity—it is a catalyst for positive change.

By embracing forward-thinking financing strategies, stakeholders can shape a more resilient, sustainable energy future for generations to come.



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1. International Renewable Energy Agency (IRENA), World Energy Transitions Outlook 2022, 2022, <https://www.irena.org/Digital-Report/World-Energy-Transitions-Outlook-2022>.