

FURURE GRIDS Alliance

Empowering Energy Utilities In Emerging Markets

As the cornerstone of power systems, utilities are at the center of the energy transition and access agenda. Technical advancements in grid digitalization, distributed generation, and battery storage are creating fresh opportunities to actively embrace the shift to affordable, clean, and reliable energy. However, utilities face increasing climate impacts and changing energy supply-demand patterns. These challenges are compounded by the global push towards universal energy access, including the expansion of networks to lower-income and isolated communities, often in complex regulatory environments.

ABOUT THE ALLIANCE

The IFC Future Grids Alliance is an IFC-led initiative designed to support emerging market utilities in implementing a just energy transition, achieving universal access to energy, and managing climate risk. Alliance members gain special access to three of IFC's unique value additions: global networking, advisory, and financing.







Finance

EXCLUSIVE GLOBAL NETWORK

Members of the IFC Future Grids Alliance will be invited to participate in IFC-organized events featuring technical experts and influential business leaders. These events include discussions on key sectoral challenges, such as grid digitalization, social priorities for utilities, emerging renewable energy technologies, sustainable finance, and corporate decarbonization and adaptation strategies. Programs are designed to foster collaboration and knowledge sharing among major power utilities in emerging markets.

ADVISORY AND PROJECT CO-DEVELOPMENT

For existing Future Grids partners, IFC offers a wide range of advisory and project co-development solutions.

Technical Advisory

Grid modernization assessments

>>> Smart metering roll-out programs

Battery storage co-development

Cybersecurity assessments

Commercial loss reduction programs

[**Q**] Technical feasibility studies

Climate Advisory

Decarbonization targets and solutions

Climate risk assessments and resilience plans

Just transition process and plans

Biodiversity assessments and solutions

Social Advisory

Gender strategies and action plans

Corporate governance assessments

Stakeholder engagement

🍰 Community outreach

Sustainable Finance Advisory

💣 Target setting

Sustainability-linked and green / blue / social financing frameworks

Second party opinions with targets and strategy support

FINANCE

Through the Future Grids Alliance, IFC provides a variety of innovative financial products, such as sustainable debt—green, blue, and sustainability-linked—equity, mezzanine, local currency, and risk mitigation instruments. These products can support investments in renewable energy, storage, network digitalization, and grid expansion, among other future-focused priorities for utilities.



SELECT INVESTMENTS













SELECT ADVISORY AND PROJECT CO-DEVELOPMENT ENGAGEMENTS



Celsia (Colombia): In parallel to providing sustainability-linked loan financing, IFC is helping Celsia address three key challenges affecting the company's grid planning and operation:

- Expanding the network, considering the addition of new distributed energy resources
- Deploying suitable equipment for fault identification and sectioning
- Optimizing network architecture

This effort aims to reduce technical losses, support higher integration of renewables in low- and medium-voltage lines, and increase the penetration of distributed energy resources.



Sempra Infrastructure (Mexico): With the goal of advancing renewable energy projects and maximizing the benefits of sustainable finance, Sempra Infrastructure and IFC joined forces in the development of the Volta de Mexicali battery energy storage system (BESS) facility in Mexicali, Mexico. Once operational, the facility will connect into the California Independent System Operator electric grid, via a Sempra Infrastructure -owned cross-border transmission line. As part of the engagement, IFC is supporting market and interconnection assessments and evaluating BESS charging and dispatch optimization models.

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