

# South Asia Regional Initiative for Energy Integration

## Theme Presentation of Working Session-3

### “Regional Investment Framework for Mobilising Investment in South Asia and South Asia Forum on Energy Investment (SAFEI)”

*Presented by*

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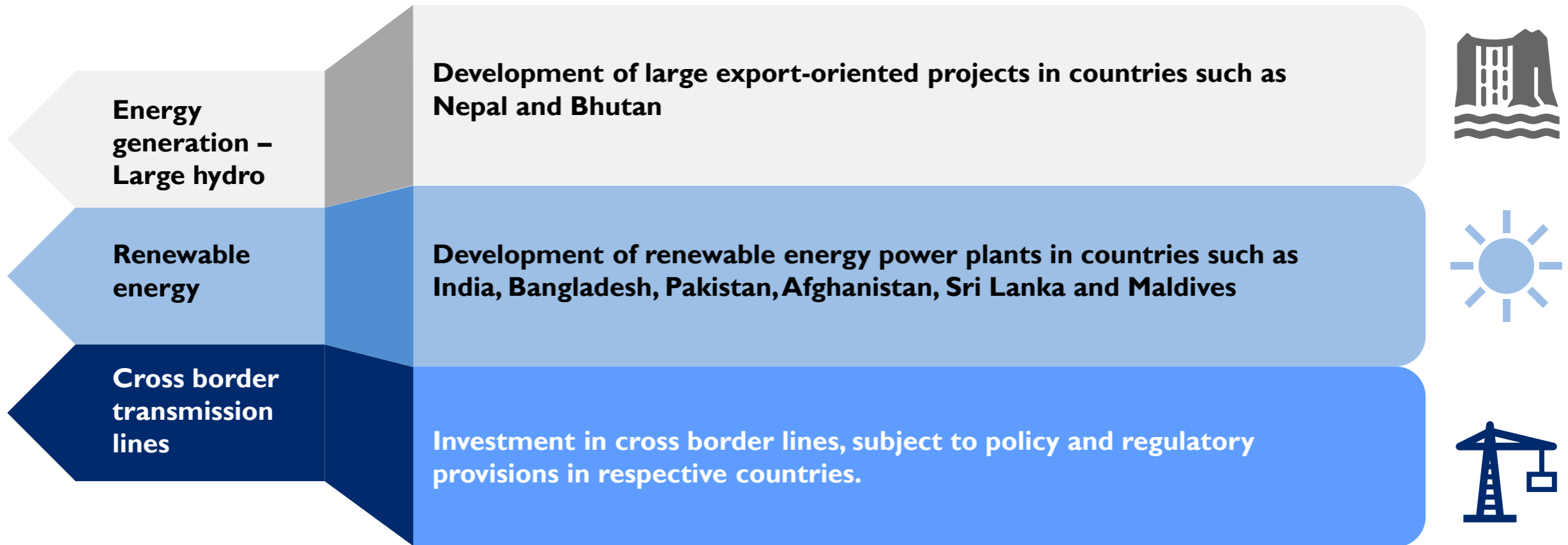
# Agenda

- Investment opportunities in sustainable energy infrastructure
- Challenges and risks for investment in greening the grid
- De-risking strategies
- Innovative financing mechanisms
- Work done by SARI/EI on Investment and Financing
- South Asia Investment Forum (SAFEI)
- Summary & Way forward
- Key areas for discussion



# Investment opportunities in sustainable energy infrastructure and CBET

Private sector investment is possible in the development of regional sustainable energy infrastructure towards cross border electricity trade, in the following main areas:



## One Sun, One World, One Grid

- **A case in example for the potential for investments in sustainable energy infrastructure is the One Sun, One World and One Grid (OSOWOG) Initiative. India has advocated for this idea of a trans-national electricity grid supplying solar power across the globe.**
- According to the draft plan of the Ministry of New and Renewable Energy (MNRE), the ambitious OSOWOG will connect 140 countries through a common grid that will be used to transfer solar power. The vision behind the OSOWOG mantra is 'The Sun Never Sets' and is a constant at some geographical location, globally, at any given point of time.
- An interconnected grid under OSOWOG would help all the participating entities in attracting investments in renewable energy sources as well as utilizing skills, technology, and finances. Further, the proposed integration would lead to reduced project costs, higher efficiencies, and increased asset utilization for all the participating entities.
- **If the plan proceeds further, this will be one of the largest investment initiatives for sustainable energy infrastructure.**

Phase 1: Interconnect Middle East, South Asia and South East Asia grids

Phase 2: Grids in phase 1 connected with the African power pools to share solar and other renewables from the resource-rich countries

Phase 3: Global interconnection

## Challenges and risks for investment in greening the South Asia energy/power system

### Across the region:

- ✓ challenges of low compliance to contracts;
- ✓ dynamic/volatile policy and legal regime;
- ✓ slow judiciary processes;
- ✓ Payment delays and payment risks as most utilities have poor financial position.

### In countries such as Nepal:

- ✓ There is no concept of pure project financing.;
- ✓ A high level of collateral is required for accessing domestic financial market.
- ✓ Foreign exchange restrictions, limiting the developer's ability to repatriate earnings.

### Cases such as that of Bhutan:

- ✓ At least a partial government ownership is preferred for large generation projects, instead of pure private sector IPPs.

#### Political and Country Risk

- Concerns on political stability and change in law
- International developers/lenders demanding sovereign guarantees

#### Financing risks

- Capability of domestic finance markets
- Access to international markets

#### Construction / operation risk

- Long process for obtaining licenses for generation, clearances including environmental and social, causes prolonged delays
- Land acquisition and resettlement process is slow

#### Policy & Regulatory Risk

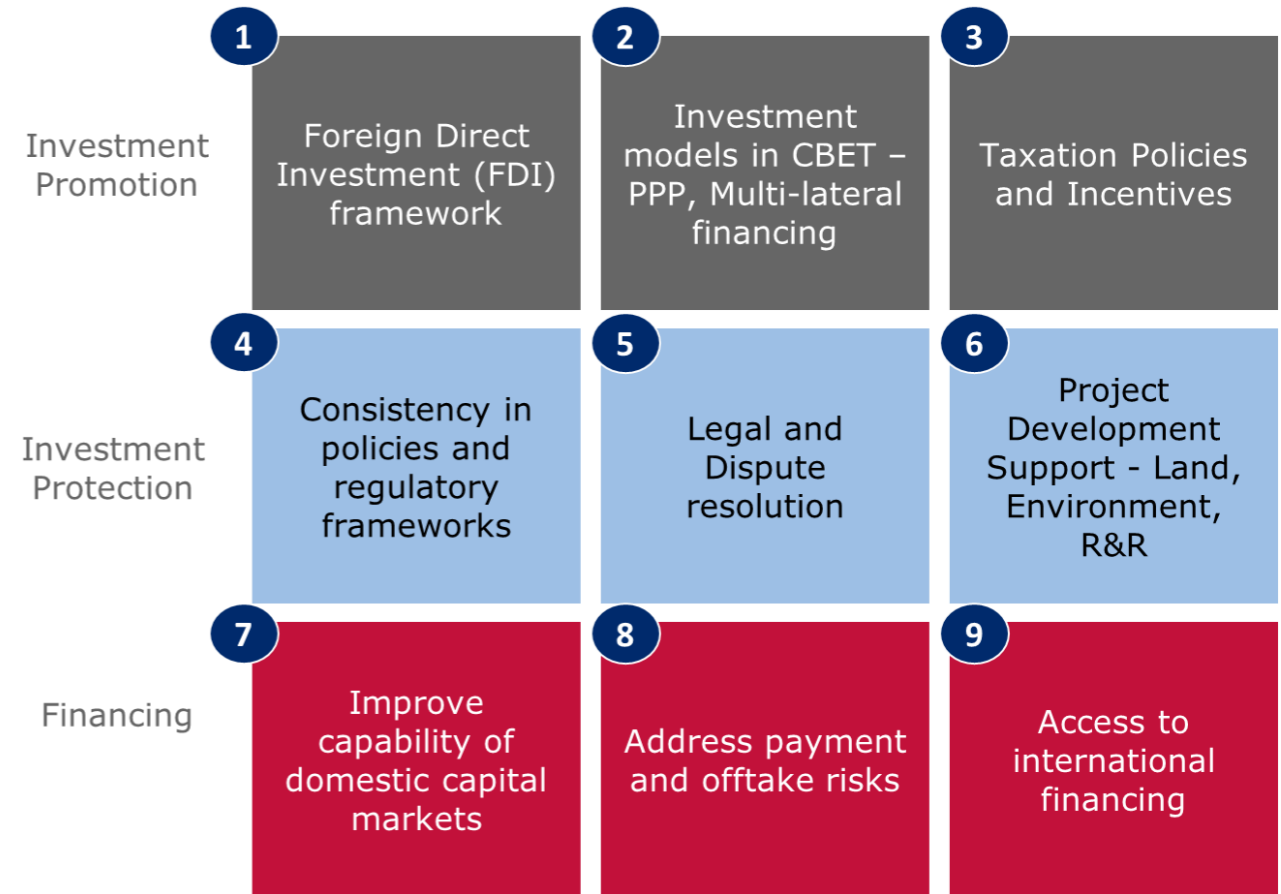
- Retrospective application
- Lack of long-term clarity
- Limitation in forex repatriation

#### Off-taker Risk (Including payment risk)

- Utility's poor financial health is a major concern
- Payment default risk perceived to be high
- Delays in the financial closure due to prolonged discussions on the commercial arrangements (PPA)

## De-risking strategies

- Policy makers and regulators to offer **more long term policy roadmaps**, with long term certainty on offered benefits;
- **Government and utilities to take steps to address payment default risks** and breach of contract by Government owned energy utilities, through institutional and judicial reforms, and offering risk mitigation support directly, or with the support of development financing institutions;
- **Develop institutional structure for faster legal and dispute resolution**, including alternate dispute resolution;
- **Provide one-stop services for assistance for projects** to deal with multiple governmental entities/departments;
- **Allow investors to access foreign exchange and international financial markets**;
- **Provide clear investment framework, taxation policies and incentives**; and
- **Support / promote the introduction of innovative financing instruments.**



## Innovative financing options

### **Access to bond market (including green bonds).**

- ✓ Tends to be difficult for pre-construction and construction stage projects because investors typically require a few years of operational history
- ✓ Mainly worked as a refinancing option for operative renewable energy assets and asset pools.

### **Clean energy market mechanisms**

- ✓ Certified Emission Reduction (CER) certificates in Europe and
- ✓ Renewable Energy Certificates (REC) in India.

### **Interest subsidy schemes in lieu of capital subsidy / grants from the government**

- ✓ Long term support instead of one time support.
- ✓ Also does not impact competitiveness of equipment prices,

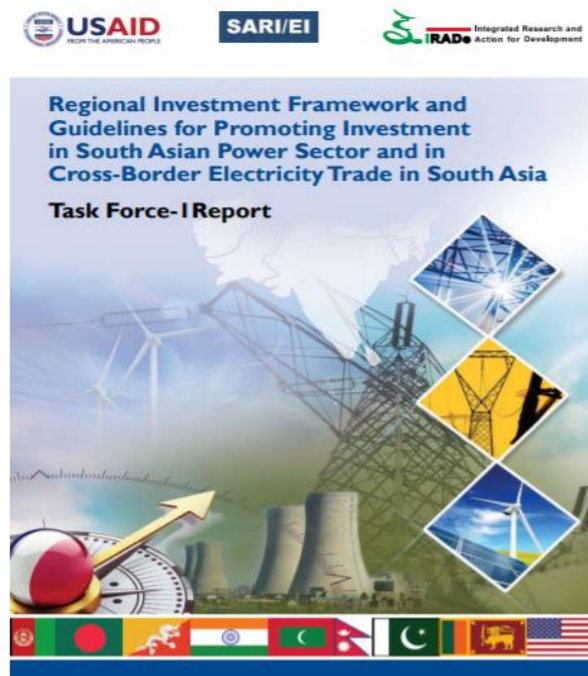
### **Yieldcos - a mechanism created around a project or number of projects that are producing predictable, stable cash flows.**

- ✓ The cash-generating projects are grouped together and "spun off" into a separate, publicly traded company.
  - ✓ This separates the risky projects, still under development from the de-risked projects already completed;
  - ✓ This lets the parent company recoup capital, and provides investors a stable investment option.
- 
- ✓ A larger fund with Governmental / multilateral backing, supporting projects indirectly through smaller funds.

# Work done by SARI/EI on Investment and Financing

## Regional Investment Framework and Guidelines for promoting investment in South Asian Power Sector & in Cross Border Electricity Trade Projects in South Asian Region

A Comprehensive Report



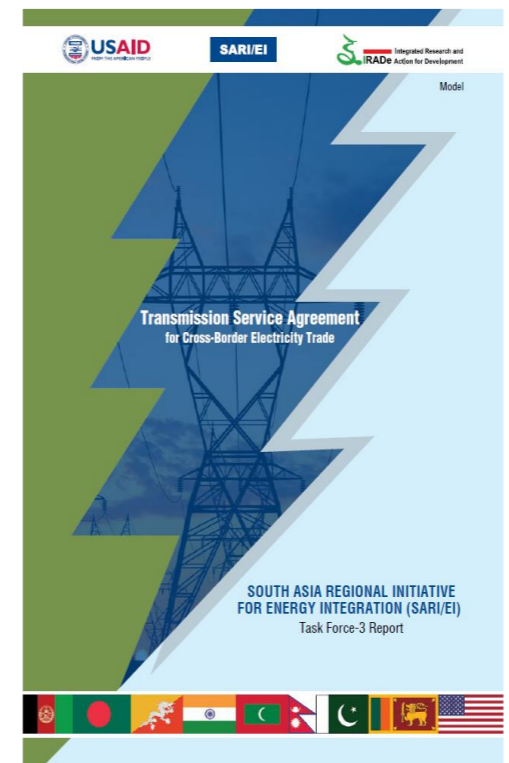
- Recommends a Region Investment Framework.
- Suggest 7 concrete measure in the form of guidelines.
- Suggests Innovative financing and Risk Mitigation Instruments.
- Recommends to create Regional Investment Facilitation Forum

## Model Power Purchase Agreement for Cross-Border Electricity Trade (CBET) Between Seller (New Hydro Generator) & Procurer



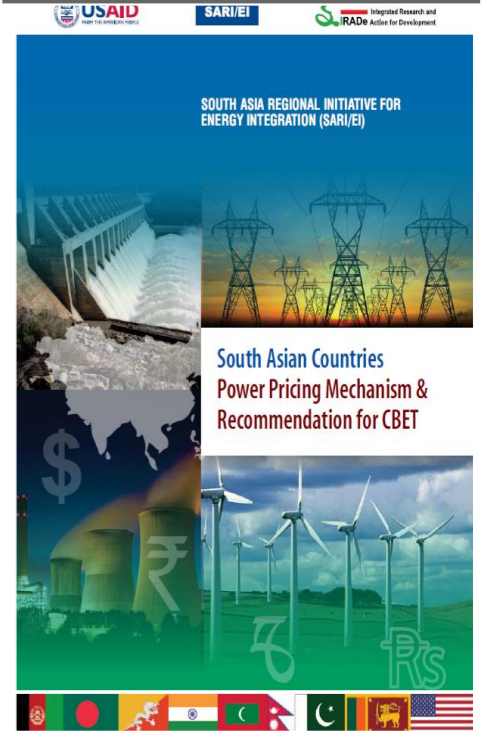
- Model PPA
- Cross Border Hydro PPA
- Customised in the SA Context

## Model Transmission Service Agreement for Cross-Border Electricity Trade



- Model Transmission Service Agreement for Cross-Border Electricity Trade
- Customised in the SA Context

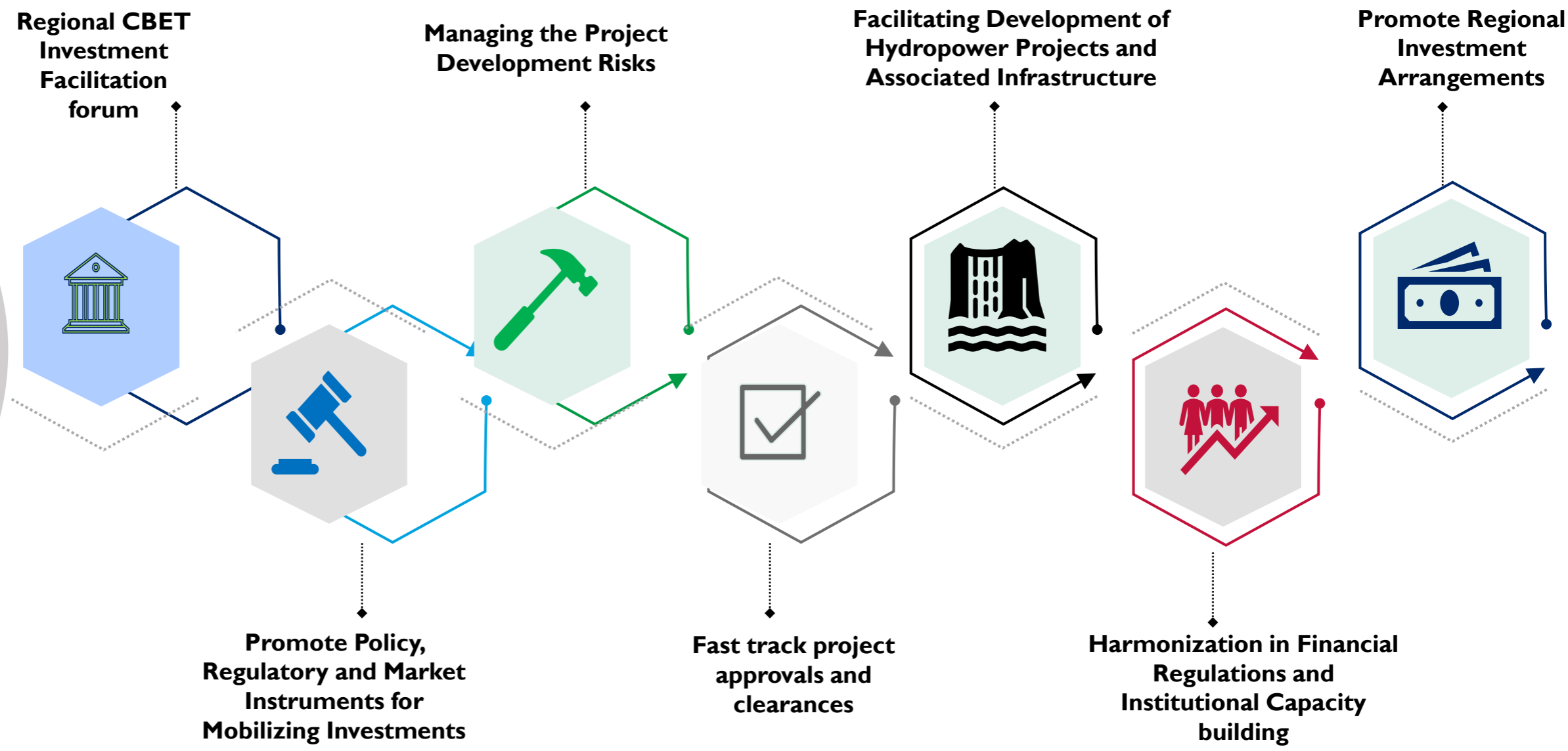
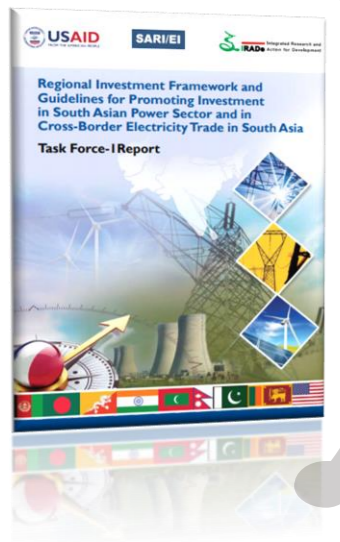
## SA Countries Power Pricing Mechanism & Recommendation for CBET



- Provides clarity on tariff and power procurement process
- Pricing related to CBET
- Transit transmission mechanism guidance



# SARI/EI study on Regional Investment Framework – Key Recommendations



# SARI/EI Initiative South Asian Forum for Energy Investment (SAFEI)



## Vision

To be a world-class regional **Centre of Excellence** for providing a platform for **Crosscutting Deliberations**, Engage with investment and finance community and energy stakeholder in **Exchange** of ideas, **Facilitation** support on the Investment & Financial aspects of Regional Energy & Cross Border Energy Trade Infrastructure Development in the South Asia Region.

## Summary & Way forward

### De-risking strategies



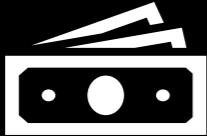
Protect against payment and offtake risks, offer long term policy certainty, develop institutional structure for faster legal and dispute resolution, risk sharing under PPP contracts, access project finance, foreign exchange and international financial markets.

### Risk mitigation instruments



MIGA's political risk insurance, Partial Risk Guarantee Fund, Partial Credit Guarantee, Sovereign guarantees, World Bank's Guarantees program.

### Innovative financing instruments



Bond markets, certificate mechanisms, interest subsidies, Yieldcos, Fund of funds etc.  
Blend Financing, New Regional Funding Source-Creation of fund-of-funds

### Regional Institutions



Regional support and facilitating institutional mechanisms such as a South Asia Forum for Energy Investment (SAFEI).

# Key Areas For Discussion



**1**

**How can policy makers adopt an optimum risk sharing between Government/utility and the private sector investment projects?**

**2**

**How can various risk mitigation strategies and instruments to be dealt with?**

**3**

**New Funding Sources ?**

**4**

**What potential role can be played by regional institutional forum focusing on investment and fiancé such as SAFEI ?**



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**Thank You**

# SARI/EI study on Regional Investment Framework – Regional Investment guidelines



## Regional CBET investment facilitation forum

- ❖ Set-up regional investment forum
- ❖ Implement guidelines for investments
- ❖ Develop regional mechanism for allocation of regional projects
- ❖ Identification and prioritization of regional investments through a regional body

## Promote policy, regulatory and market instruments for mobilizing investments

- ❖ Setting up of rules, regulations and procedures for export-oriented projects
- ❖ Mobilize multilateral institutions and other low interest financing options
- ❖ Offer fiscal incentives like tax breaks to developers
- ❖ Harmonize tax incentives and benefits across the region

## Managing the project development risks

- ❖ Member countries to have guidelines for mitigating political risks such as nationalization
- ❖ Regional guidelines for leveraging Instruments available with MFIs like MIGA
- ❖ Provisions for dispute resolution through regional framework

## Fast track project approvals and clearances

- ❖ Member countries' government to provide single window clearance for necessary approvals and licenses
- ❖ Prepare inventory of processes to be followed in member countries for CBET project approvals, etc
- ❖ Issues related to land, environment and R&R to be dealt with on priority basis

## SARI/EI study on Regional Investment Framework – Regional Investment Guidelines



### Facilitating development of hydropower projects and associated infrastructure

- ❖ Member countries to work for minimizing off-take risk and providing payment security mechanism for projects
- ❖ Tap the green energy funds and multi-lateral funding agencies for project financing
- ❖ Policy initiatives like interest subvention, tax breaks
- ❖ Regulatory incentives to address tariff issues to improve competitiveness of hydro vis-à-vis other resources
- ❖ Develop Public Private Partnership (PPP) frameworks for regional projects

### Harmonization in financial regulations and institutional capacity building

- ❖ Harmonizing regulatory requirements for mobilizing investments within the region and overseas
- ❖ Evolve regional consensus on conflict management and dispute resolution framework amongst member countries
- ❖ Support deepening of capital markets in the region for mobilizing intra-regional investments in CBET
- ❖ Improving information exchange
- ❖ Institutional strengthening and capacity building of institutions in the member countries

### Promote regional investment arrangements

- ❖ International and bilateral treaties and agreements to support investments
- ❖ Develop templates for contractual frameworks for cross border projects
- ❖ Attract concessional financing, low cost financing from MFIs, Green Bonds, etc