

South Asia Regional Energy Partnership (SAREP)

Theme Presentation

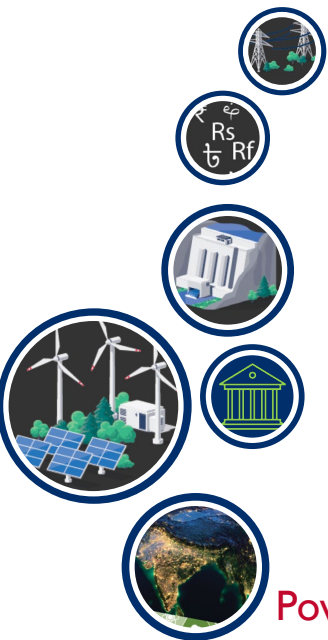
on

South Asia Forum on Energy Investment (SAFEI) and International Best Practices-Project of Common Interest

Session-2 on Opportunities and Challenges for mobilizing investment in Regional Energy
Projects in South Asia and Institutionalizing the SAFEI

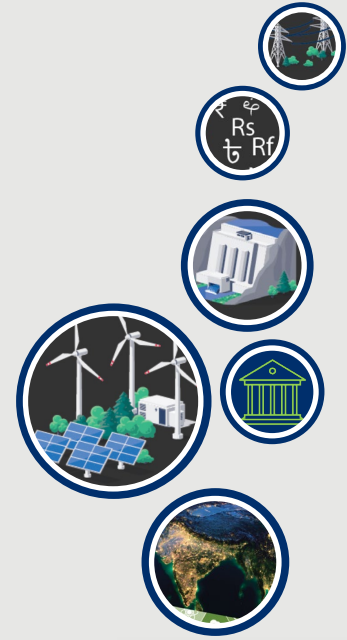
Power Summit, 2023, 11.30-13.00 HRs, 18th April 2023, Hotel Hyatt Regency Kathmandu, Nepal

Presented by
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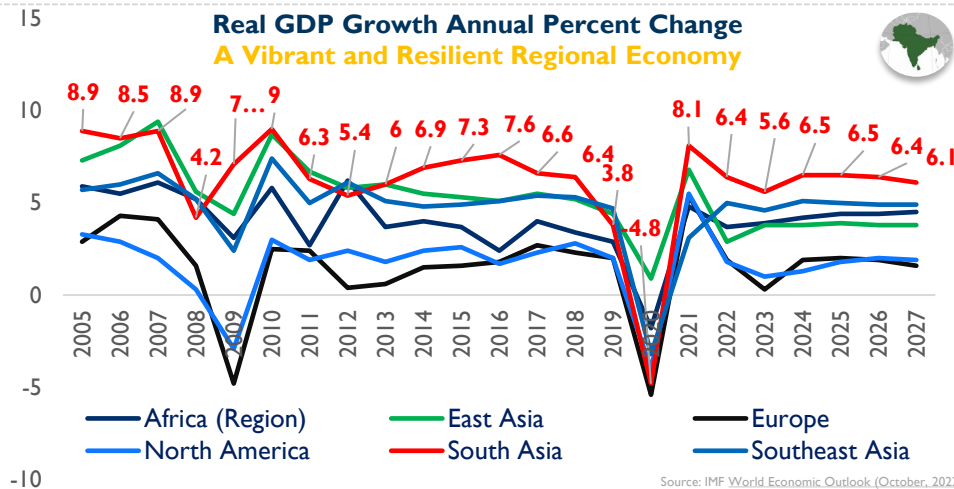
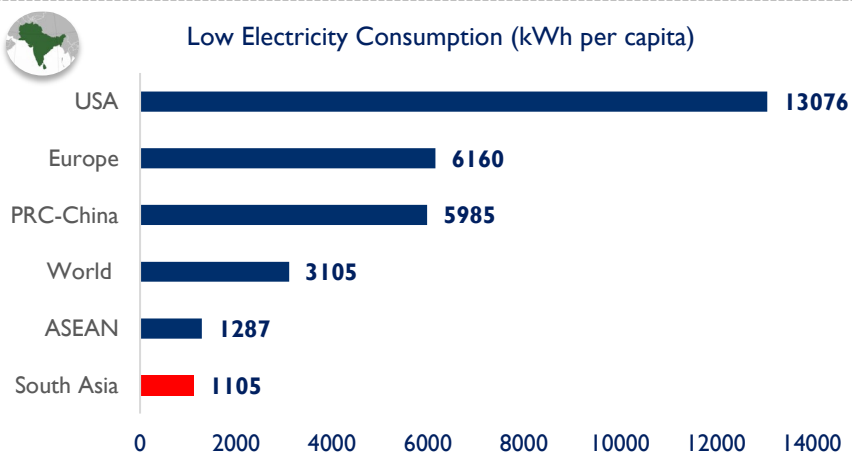
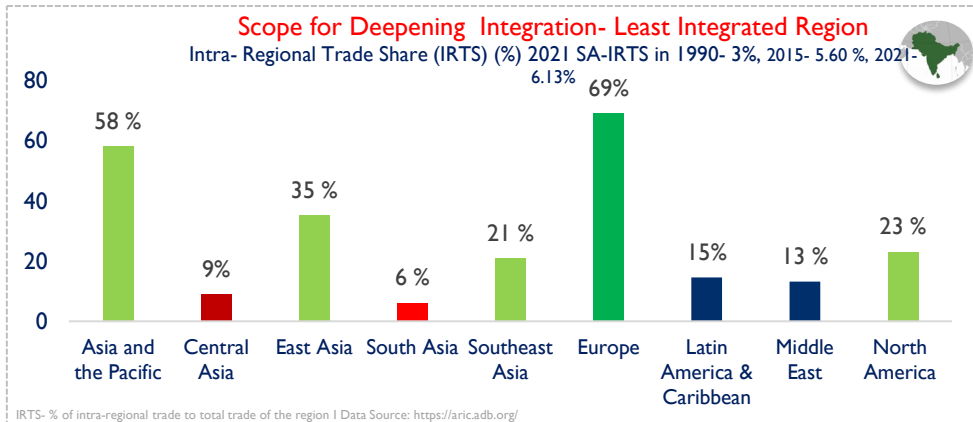
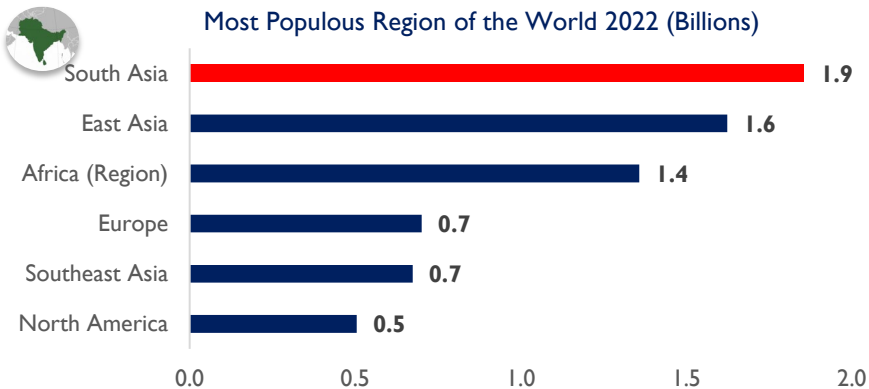




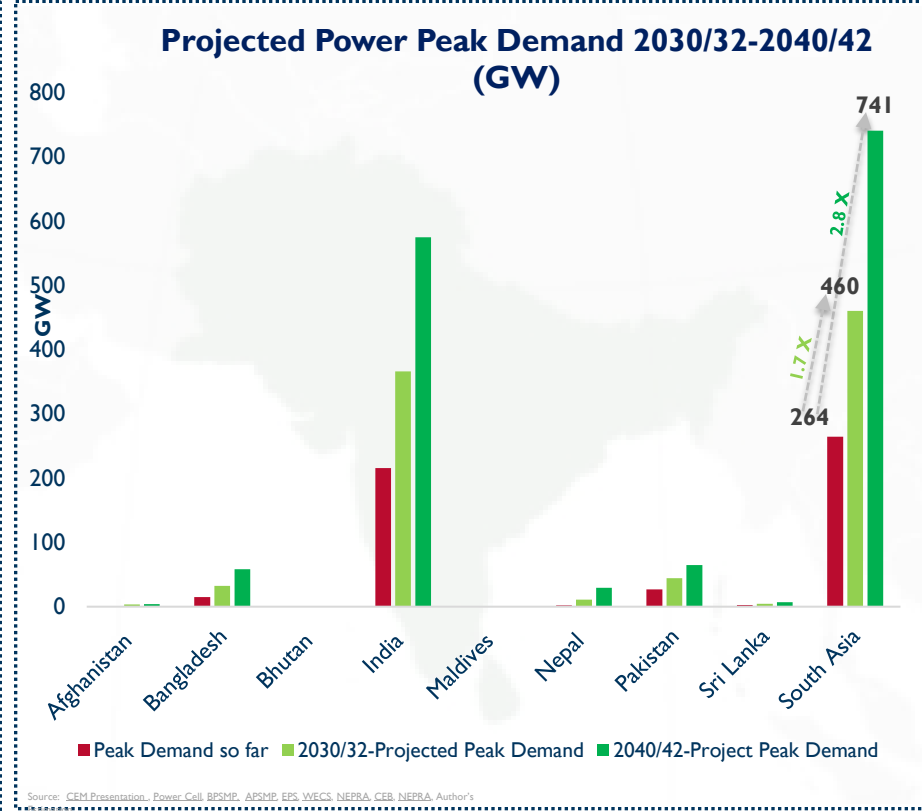
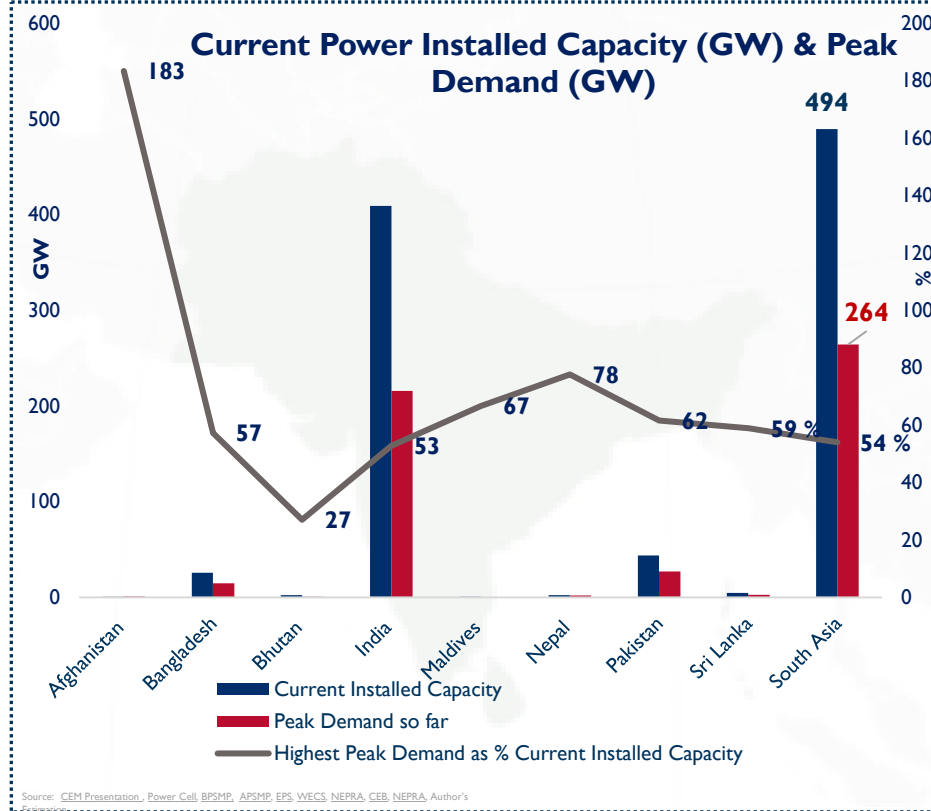
01 South Asian Context and Background



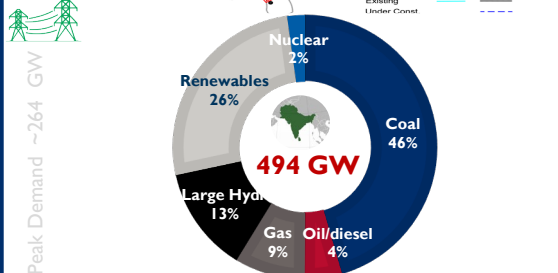
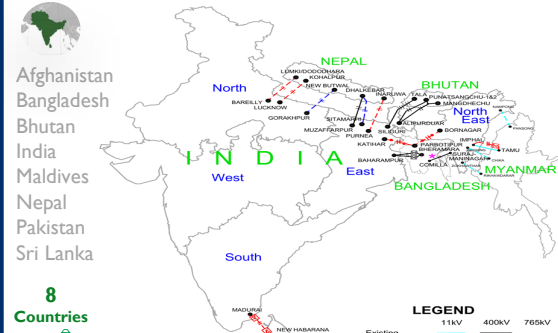
Overview of South Asia (SA): A Unique & Dynamic Region of the World



Overview of South Asia Power Sector-A Snapshot



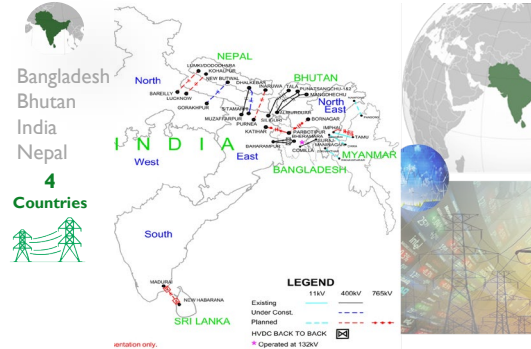
Opportunity for Generation Capacity Optimization | Massive demand growth in future | Significant Capacity addition will be needed



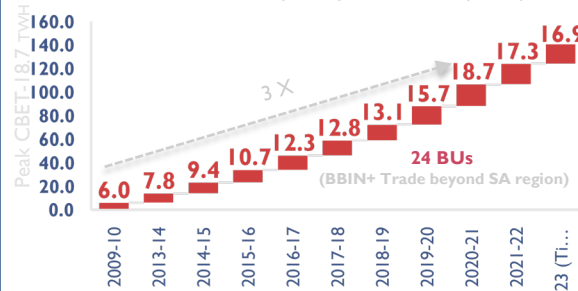
I Installed Capacity- 494 GW⁽²⁰²³⁾ | Fossil Dominance-289 GW(~60%) | Coal Dominated-225 GW(45%) | Natural gas (9%), Oil (4%) based | RE-190 GW (38%) | RE-Hydro:129 GW (26 %)

~4.5 GW of x Border Interconnection | **~ 10 X** increase in xBI
Total 43.8 GW of xBI by 2036/2040

Fossil Domination | Diverse Fuel Mix | 500 GW Power System
| Rapid Expansion in X Border Interconnection Planned

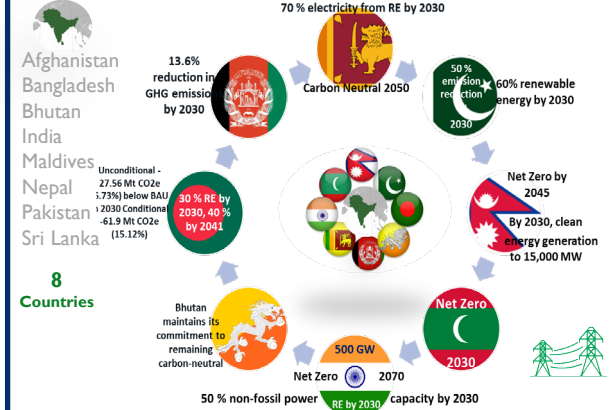


South Asia (BBIN) CBET BUs (TWH)



Bilateral, Mix of G-G & Commercial, CBET Through PX
 **(Only in Asia)**, Bidirectional, **Trilateral CBET Upcoming**

Large CBET Potential | CBET low compared to other regions |
ASEAN 49 TWH | EU 240 TWH | South Asia 24 TWH



1. **World's 1st Carbon Neutral Country-Bhutan**
2. **Net Zero by 2030-Maldives**
3. **Net Zero by 2045-Nepal**
4. **Carbon Neutral by 2050-Sri Lanka**
5. **30% RE by 2030 and 40 % RE by 2041-Bangladesh**
6. **15 GW clean energy by 2030-Nepal**
7. **Net Zero by 2070-India**
8. **500 GW RE Installed Capacity by 2030-India**

OSWOG initiative will also accelerate the rapid deployment of  Solar in South Asia and Beyond

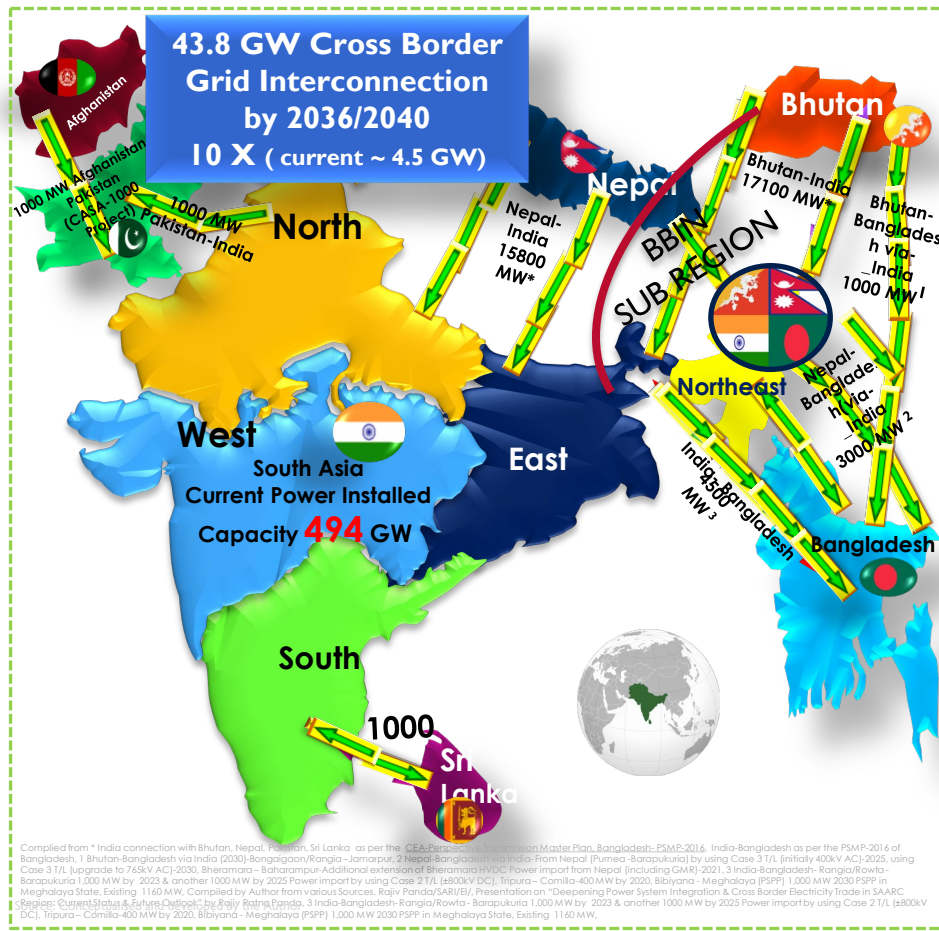
02

Investment Needs, Regional Energy Projects, Risks



- ❑ Decarbonisation Goals will **require significant additional investment.**
- ❑ **3.4 Trillion** Climate Smart Investment opportunities by 2030 in South Asia *
- ❑ South Asia would spend **1.39 trillion US\$** to add ~750 GW of electricity generation capacity and **29 billion US\$** for planned inter-grid connection by 2040 **.
- ❑ **43.8 GW** of Cross Border Interconnection by 2040
- ❑ BIMSTEC region needs **958 billion US\$** for generation and **122 billion US\$** for Transmission*** **by 2035.**

* Source: Climate Investment Opportunities in South Asia An IFC Analysis ** World Bank: WPS7341 *** BIMSTEC Energy Outlook – 2035



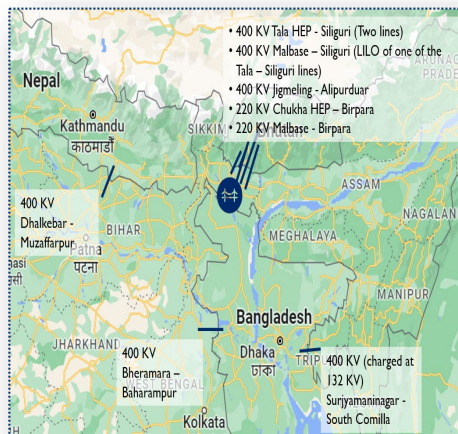
Significance of regional energy investment projects increasing



Defining regional energy investment projects

- beneficiaries of the project are located in more than one country in the region
- investment of one country, made on energy infrastructure projects in another country

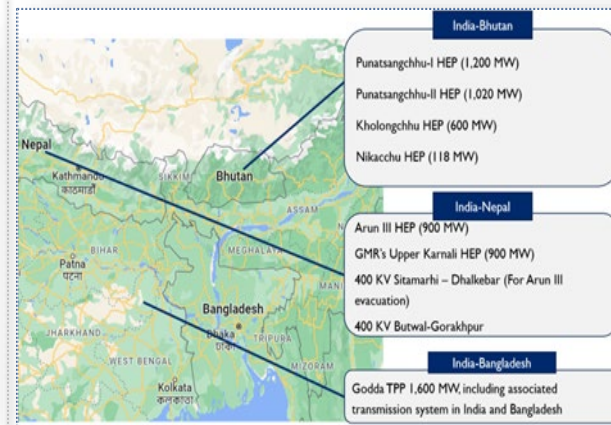
X Border Transmission lines 220 KV and above



Regional Power Generation projects

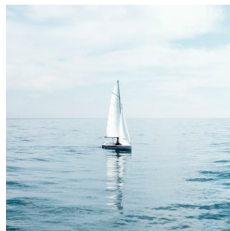


A number of new projects under construction/advanced stage of financial closure and completion



* Godda TPP Unit 1 was commissioned recently in April 2023

Nature of Regional Energy and CBET Project – Uniqueness and Risks



Long Term

Political and
Country Risk

Financing
Risks

Off-taker Risk
(Including
payment Risk)

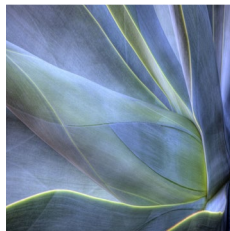
Irreversible



Policy &
Regulatory
Risk

Construction
/ operation
Risk

Expropriation
and breach
of Contract



Multiple
Jurisdiction

Dispute
Resolution
Risk

Security Risk

Pricing Risks

An Ecosystem Approach: A combination of *de-risking strategies, risk mitigation instruments, innovative financing instruments, and regional forums* can create the needed ecosystem



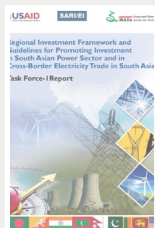
03 ➔ The Approach of Strategy Paper on SAFEI



The approach of the Strategy Paper on SAFEI



Strategy Paper was developed by USAID's South Asia Regional Initiative for Energy Integration (SARI/EI).

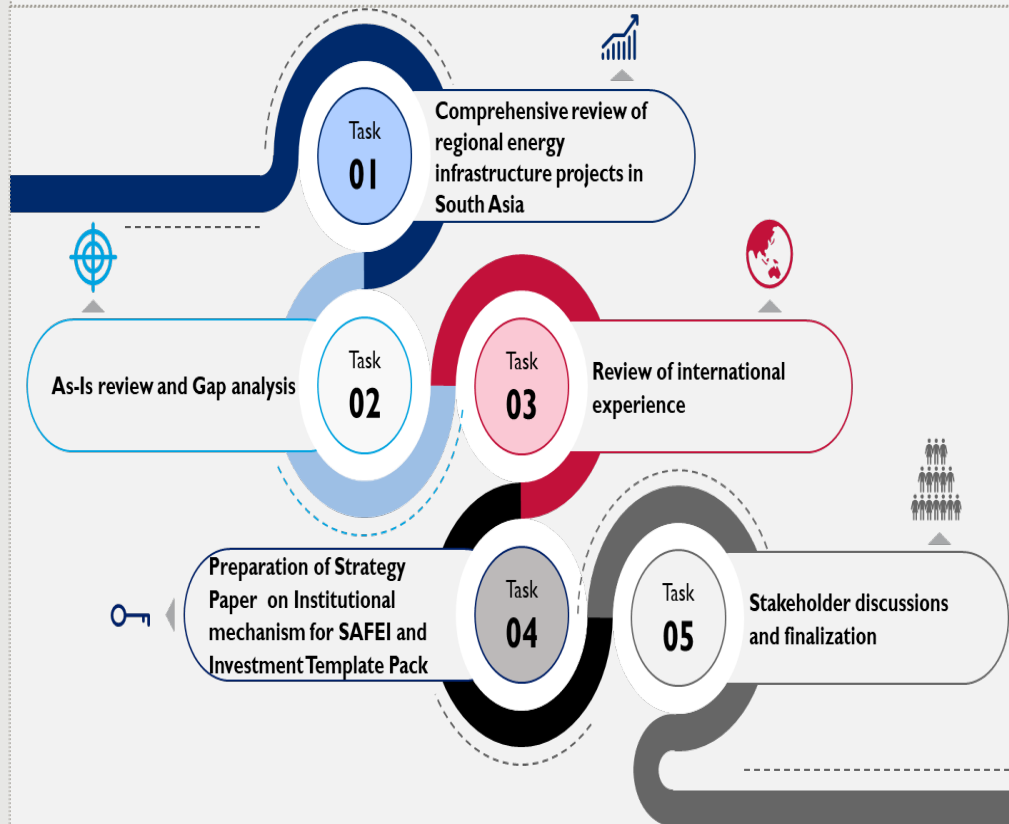


As a follow on to the Task Force-I Report on Regional Investment framework, which recommended the creation of a “Regional Investment Facilitation Forum”

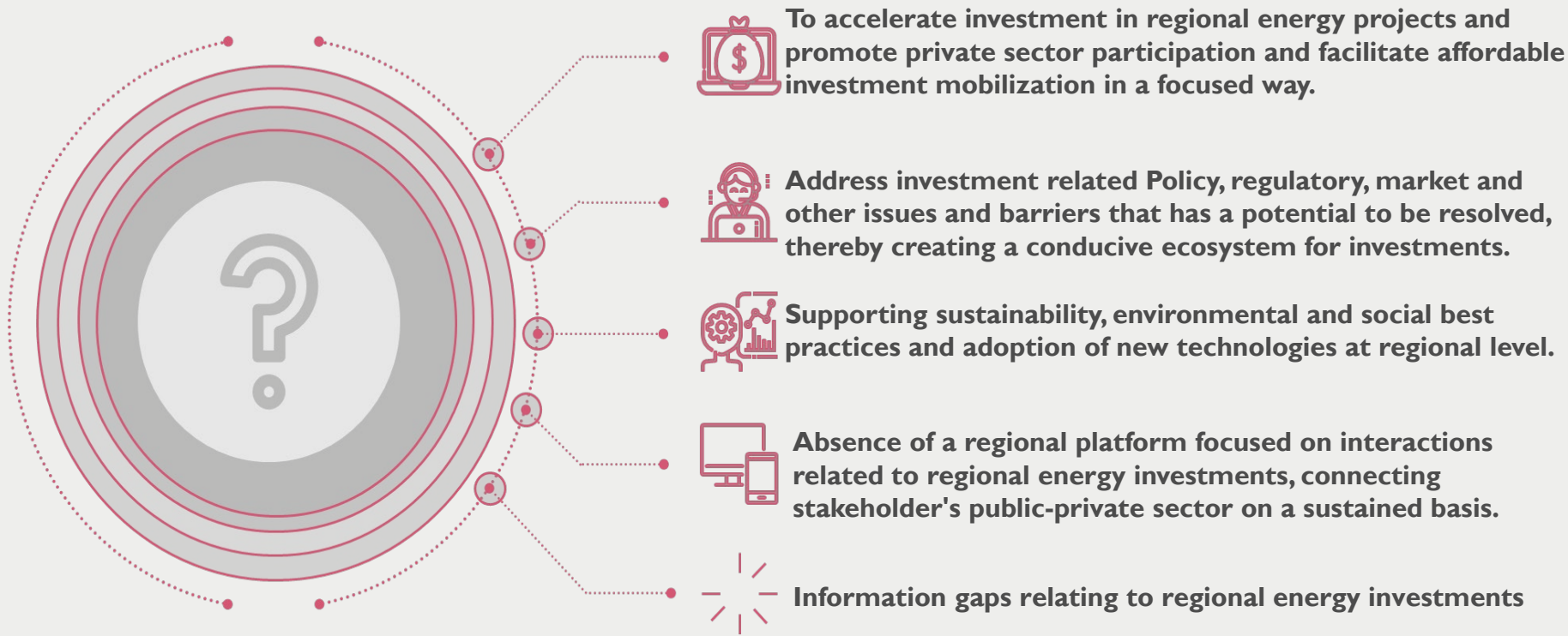


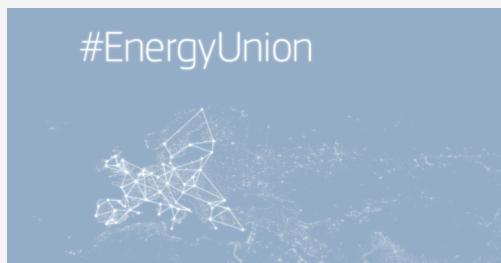
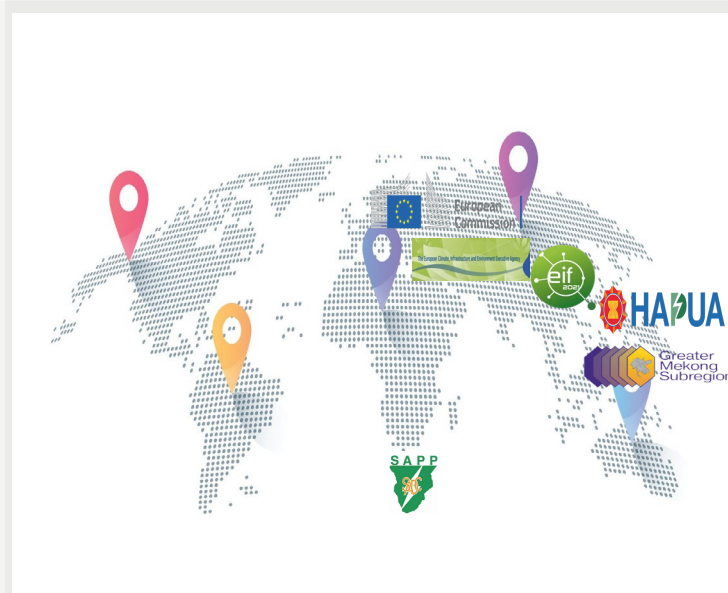
The strategy paper on **South Asia Forum on Energy Investment (SAFEI)** - ascertains the need and the prospects of regional projects, facilitating enabling environment, suggests **Institutional framework, structure, function, and role of SAFEI.**

Overall approach for the development of Strategy Paper



03.2 Why is a Regional Energy Investment Forum needed?



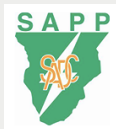


04 → Key learnings from review of international experience

Project Advisory Unit (PAU) was formed with the aim of assisting in operationalizing the selected priority projects in SAPP participating countries

“to advance the preparation of selected priority projects in the Southern African Power Pool participating countries”

- Conduct regional analytical work;



Do the studies to get the project to a bankable state.

Use the grant funding received by the SAPP Coordination Centre to screen, select, prepare and monitor the implementation of regional priority projects; and

- Play an advisory role to SADC governments and utilities.

Source : SAAP , SAAP and Strategy Paper SAFEI

Examples of PAU supported projects

- Mozambique-Zambia 400KV power interconnection project
- Kolwezi (Democratic Republic of Congo)-Solwezi (Zambia) 330 kV Power Interconnector



Source : SAPP SADC Grid Map and Strategy Paper SAFEI

SAPP Regional Transmission Infrastructure Financing Facility (RTIFF)

An ongoing effort of SAPP to finance development of regional transmission infrastructure. The development of RTIFF is supported by the World Bank, the Government of Norway and the Swedish International Development Cooperation Agency

International Experience- Energy Investment Forum of Central Asia Regional Economic Cooperation Program (CAREC)



CAREC's **Energy Investment Forum (EIF)**
Central Asia's Flagship event to enable
private **investments** in the **energy** sector.



50%

Hold annual CAREC
energy Investment
Forum

Deliverables:
Energy Investment
Forum 2019

Energy Investment
Forum 2021

Regional Start-Up
Competition 2019

Regional Start-Up
Competition 2021

Provide practical
support to investors
to enhance their
business operations
in the region

Prepare a regional
investment strategy

1

Upcoming

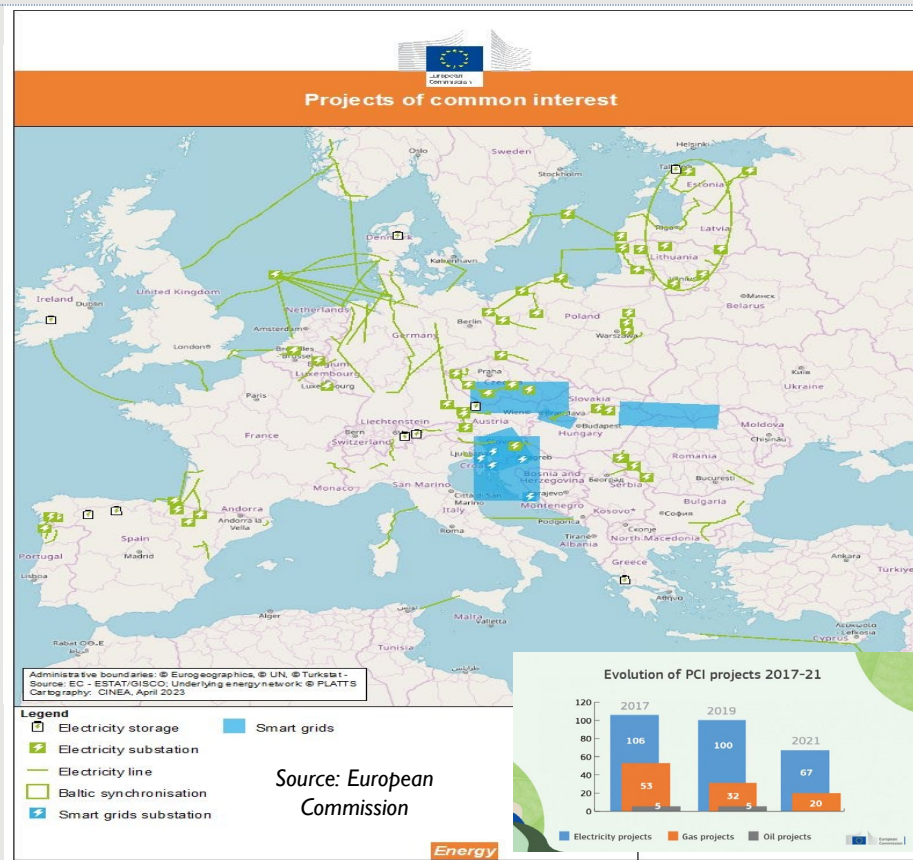
2

Completed

3

Upcoming

- Projects of Common Interest (PCIs) aim to support EU to achieve its energy policy and climate objectives - affordable, secure, and sustainable energy for all citizens, and the long-term decarbonisation of the economy.
- These are the key cross border high risk infrastructure projects that link the energy systems of EU countries.
- PCIs benefit from accelerated permitting procedures and funding.
- PCIs can take funding from the **Connecting Europe Facility (CEF)**, the EU fund for boosting energy, transport, and digital infrastructure.
- CEF support comes in the form of grants. €5.8 billion budget for CEF, for 2021-2027.**
- Being assessed in the ENTSOe's Ten Year Network Development Plan (TYNDP) is a pre-condition for a project to be granted PCI Status.



Summary of learnings from review of international examples

	Project preparation and analytical studies	Assistance in financial closure	Project implementation/monitoring support	Regional investment strategy	Regional investment fund	Discussions, knowledge sharing
PAU in SAPP 	✓	✓	✓		✓	✓
CAREC EIF 	✓			✓		✓
CEF in EU 					✓	
Sustainable Energy Investment Forum Europe  	✓					✓
Heads of ASEAN Power Utilities Working Group 	✓			✓		✓
Regional Power Trade Coordination Committee (RPTCC) in GMS 	✓			✓		✓

05 Institutional framework for SAFEI-

Vision, Mission,
Objectives,
Membership,
Funding





Vision



VISION

To become the **regional centre of excellence** for creating an **investor friendly ecosystem** for the development of **sustainable regional energy projects** and **advancing cross border energy trade** in South Asia.



Mission



MISSION

To **facilitate, support and promote regional energy investments** in South Asia in a **sustainable and cost-effective manner**.



1



Facilitate Development of conducive and investor friendly ecosystem

2



Advocate for development of regional policy, regulatory, legal & commercial framework

3



Facilitate the mobilization of financing with increased private sector participation

4



Promote the adoption of sustainable and new technologies, best practices

5



Act as a credible source of all investment related information, and its dissemination for investor community for prudent investment decision

6



Undertake cross cutting analysis, research and commission studies on regional energy investment opportunities- South Asia Regional Energy Investment Outlook

7



Serve as a regional platform to facilitate networking and outreach

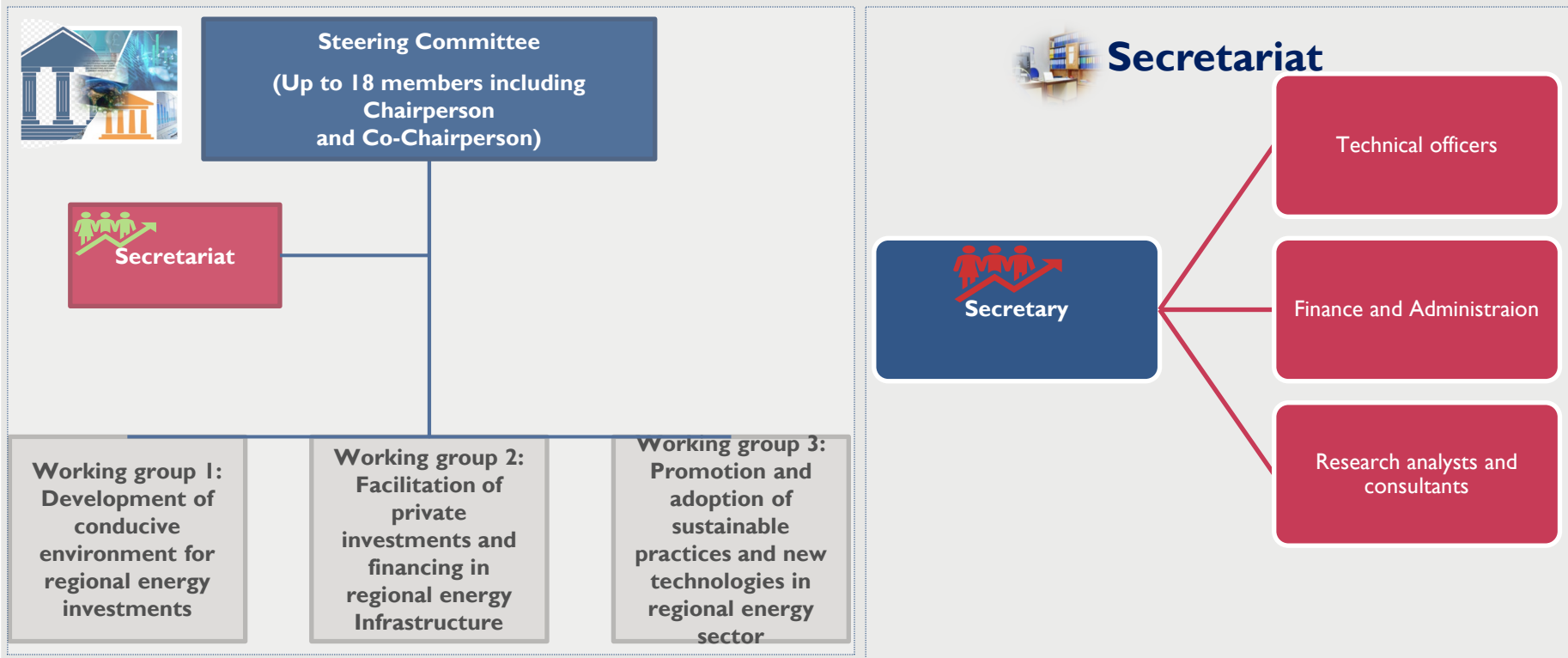


Any relevant organization that is **willing to be part of SAFEI** may be allowed to become the forum's member, subject to **any administrative requirements such as agreeing to the charter of SAFEI**, payment of **any membership fees** in the **future** etc.



- ❖ National Investment promotion bodies
- ❖ Industry associations/chambers of commerce and industries
- ❖ Government and privately owned banks and financial institutions
- ❖ National power utilities involved in cross border projects
- ❖ Private power companies involved/interested in cross border projects
- ❖ Energy departments or ministries
- ❖ National planning authorities
- ❖ Research institutions and think tanks
- ❖ Regional energy programs
- ❖ Development partners/donor/aid agencies
- ❖ Any other organization involved in energy or finance sectors

SAFEI Institutional Structure, Secretariat and Funding

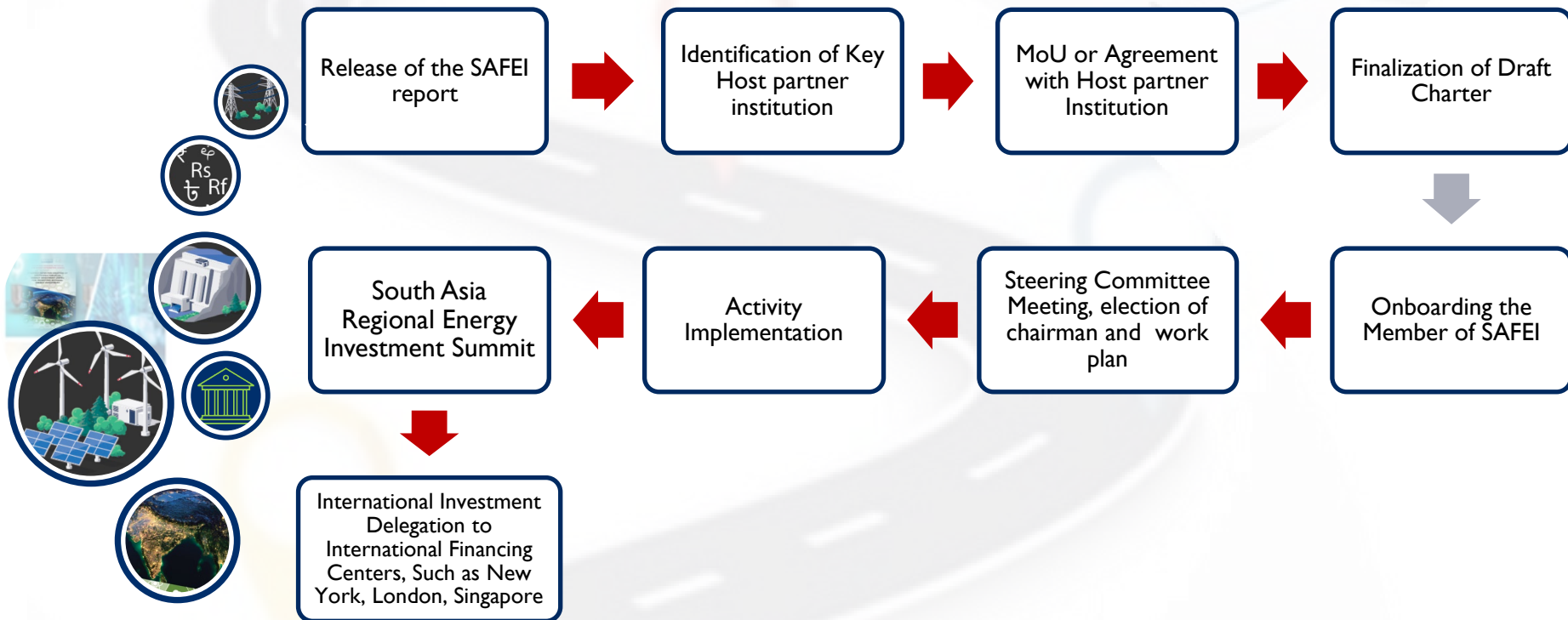


SAREP is implementing and Institutionalizing the SAFEI. During the Initial Period, support is being provided by USAID's SAREP, but Once the operations are stabilized, a self-sustainable option of membership funding is to be explored.



06 ➔ **Way forward**

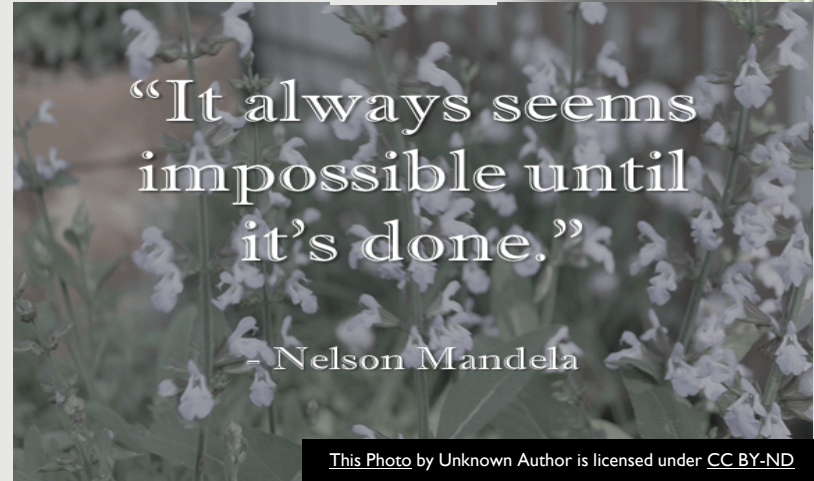
South Asia Forum on Energy Investment (SAFEI): Way forward





JOIN SAFEI

Thank You



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Disclaimer

The data, information and assumptions (hereinafter ‘data-set’) used in this document are in good faith and from the source to the best of SAREP (the program) knowledge. The program does not represent or warrant that any data-set used will be error-free or provide specific results. The results and the findings are delivered on “as-is” and “as-available” data-set. All data-set provided are subject to change without notice and vary the outcomes, recommendations, and results. The program disclaims any responsibility for the accuracy or correctness of the data-set. The burden of fitness of the data-set lies completely with the user. In using the data-set data source, timelines, the users and the readers of the report further agree to indemnify, defend, and hold harmless the program and the entities involved for all liability of any nature.

Objectives of South Asia Forum on Energy Investment (SAFEI)

1



Facilitate Development of conducive and investor friendly ecosystem



Credible platform for interaction | Suggest innovative policy, fiscal and market instruments | clear risk sharing and management framework | risk mitigation instruments

2



Advocate for development of regional policy, regulatory, legal & commercial framework



Suggest changes investment/finance related policy, regulatory, legal, investment and commercial framework | Joint recommendations/requests of investors | Stakeholder interaction

3



Facilitate the mobilization of financing with increased private sector participation



Formulation of pipeline of projects | innovative financing instruments and business models | Facilitate initial interactions with investors |

4



Promote the adoption of sustainable and new technologies, best practices- Environmental & social safeguards



Promote the adoption of international best practices of environmental and social safeguards | energy storage, distributed renewables, blockchain etc. from the perspective of CBET of energy storage services and regional energy integration

Objectives of South Asia Forum on Energy Investment (SAFEI)

5



Act as a credible source of all investment related information, and its dissemination for investor community for prudent investment decision



Develop an information repository covering new and proposed regional energy investments | Project success stories | Standard templates and quick reference guides

6



Undertake cross cutting analysis, research and commission studies on regional energy investment opportunities



Development and updating of investment templates | Undertake project specific analysis in initial stages of project preparation | South Asia Regional Energy Investment Outlook

7



Serve as a regional platform to facilitate networking and outreach



Platform for networking, knowledge exchange, capacity building and consultations | SAFEI Quarterly Newsletters | high-level investment delegations | Regional Investment Summit

Objectives of SAFEI

1. Facilitate the development of a conducive and investor friendly ecosystem for creating a sustainable market for energy investment.
2. Advocate for the development of coordinated and harmonious policy, investment and commercial framework across countries of South Asia for accelerating the investments in CBET and regional energy projects.
3. Facilitate the mobilisation of financing and investment avenues with increased private sector participation in regional energy projects.
4. Promote sustainable regional energy projects and the adoption of associated frontier technologies and best practices.
5. Act as a credible source of all investment related information in respect of regional energy projects and help dissemination of such information for investor community in taking prudent investment decision.
6. Undertake cross cutting analysis and research and commission regional studies on regional energy investment opportunities with special emphasis on international best practices.
7. Serve as a regional platform to facilitate networking, information and knowledge exchange, including stakeholder outreach.

Functions of SAFEI (1/2)



**Development of
conductive and investor
friendly ecosystem**

- Provide platform for interaction
- Suggest innovative policy, fiscal and market instruments
- Undertake proactive studies
- Identification of broad solutions for risk mitigation



**Advocate for
development of regional
policy, regulatory, legal &
commercial framework**

- Analyse the need for changes in country level frameworks/provisions
- Initiate dialogues with policy makers on solutions to investment barriers
- Facilitate development of joint recommendations/requests of investors
- Provide support to policy makers to promote regional investments.



**Facilitate the
mobilization of financing
with increased private
sector participation**

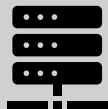
- Identification of financing sources and regional investment opportunities
- Identification of a list of regional energy investment projects to explore opportunities of investment
- Facilitate initial interactions between multiple financing sources & investors



**Promote the adoption of
sustainable and new
technologies**

- Promote the adoption of environmental and social safeguards in development of sustainable energy infrastructure
- Facilitate adoption of such new technologies such as energy storage, distributed renewable etc.

Functions of SAFEI (2/2)



Act as a credible source of all investment related information, and help in its dissemination

- Highlight the importance of regional projects, commercial aspects and their advantages
- Develop an information repository covering new and proposed regional energy investments
- Development of standard templates and quick reference guides



Undertake cross cutting analysis and commission studies on regional energy investment opportunities

- Undertake detailed analysis and research on investment opportunities
- Develop common toolkits and frameworks for opportunity analysis
- Develop and update investment templates
- South Asia Regional Energy Investment Outlook
- South Asia Regional Energy Investment Forum



Serve as a regional platform to facilitate networking and outreach

- Identification of financing sources and regional investment opportunities
- Identification of a list of regional energy investment projects to explore opportunities of investment
- Facilitate initial interactions between multiple financing sources & investors