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South Asia Regional Initiative for Energy Integration

Presentation

on

*Updates on the Activities of the SAFIR Working group on
“Regulatory Cooperation to Facilitate Knowledge sharing, addressing Crosscutting
Energy/ Electricity Regulatory Issues and Capacity Building in South Asia”
and Plan for Implementation of Key Activities*

Presented by

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*19th South Asian Forum for Infrastructure Regulation (SAFIR) Executive Committee Meeting (ECM)
(Virtual Meeting), 11.00 AM , Friday, 28th August 2020, New Delhi, India*



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Integrated Research and
Action for Development

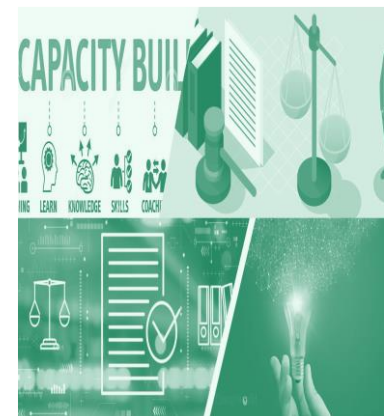
Objective and TOR of the SAFIR Working Group



Key Objective of the SAFIR Working Group



Enhancing **Regulatory Cooperation** to Facilitate **Knowledge sharing**;



Addressing Cross cutting **Energy/Electricity Regulatory Issues** and **Capacity Building** in South Asia;



Facilitate **transparent regulatory framework**, promoting **investment** in the South Asia Region.

TOR of the SAFIR Working Group

To **facilitate regulatory capacity building** among member countries at both national and regional levels through information **knowledge sharing** and **skills training**.

To **facilitate** the development of **electricity/energy regulations** by identifying and addressing cross cutting energy/electricity regulatory issues for advancing Exchange of Electricity/Energy in South Asia region.

To provide **inputs on policy & regulations/regulatory opinions/regulatory guidelines** and to **develop model regulations**.

To **undertake research** work on issues relevant to electricity /energy sector regulation through in-house/ outsourcing.

Prepare a detailed **road map** along with various **regulatory interventions** needed in South Asian countries for effective energy cooperation in the region to **prepare annual status report** and **updates on regulatory cooperation** in the South Asia Region.

Create data bank/knowledge repository on energy/electricity related issues. Prepare South Asia Energy/Electricity **Regulatory Compendium**.

To develop web portal on "**South Asia Energy/Electricity Knowledge Resource Database**". **SAFIR–Regulatory Newsletter** to enhance **regulatory knowledge sharing**.



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Key Activities of the SAFIR Working Group



Key Activities of the SAFIR Working Group



A **Research & Technical Studies - (Three Studies)**



B **South Asia Energy Sector Training & Capacity Building** program on energy regulation for Energy Cooperation & exchange of electricity in South Asia



C **South Asia Energy/Electricity Regulatory Compendium (SAERC)**



D **South Asia Energy/Electricity Knowledge Resource Database (SAKERD)**



E **SAFIR-Regulatory Newsletter (SRNL)**



F **SAFIR Working Group Meeting**

A Study/Research & Technical Studies -(Three Studies)



A Study/Research under SAFIR Working Group



1 Study /Research on South Asia electricity/electricity regulations to develop regulatory pathway/Road Map for Electricity/Energy exchange and Energy Cooperation (EC) in SA



2 Regulatory interventions for Grid discipline and Grid reliability in the South Asian Region



3 Study on Cross Border Trade of Electricity- Potential Optimum Utilisation and Reduction in Cost of Supply

A1 Study/Research on South Asia electricity/electricity regulations to develop regulatory pathway/Road Map for Electricity/Energy exchange and Energy Cooperation (EC) in SA

Objective of the Study :



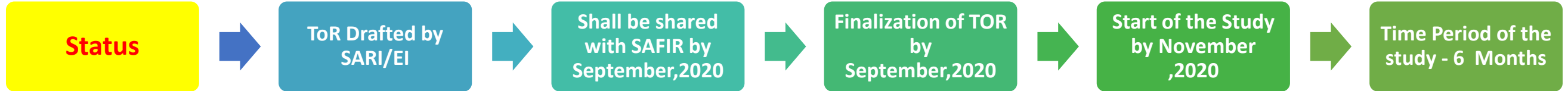
To review, study and analyze the existing **energy/electricity regulations** of each South Asian countries to develop **regulatory pathway/Road Map** for Electricity/Energy exchange, **cross border electricity/energy trade** and **Energy Cooperation (EC)** in South Asia.



Identify and analyze the **relevant provisions** in all existing **energy/electricity regulations** that have an **impact on optimal, reliable and economic Electricity/Energy exchange**, cross border electricity/energy trade and carry out a detailed **gap analysis** for the same, from the perspective of enhanced cross border electricity/energy trade.



Suggest and recommend the **necessary changes/additions** or new regulations that is required in the respective countries' for **advancing Electricity/Energy exchange**, **cross border electricity/energy trade** and **Energy Cooperation (EC)** in South Asia.



A2 Study/Research on Regulatory interventions for Grid discipline and Grid reliability in the South Asian region

Objective of the Study :



To review and analyse all the existing relevant electricity **regulations, mechanisms** and **technical frameworks** with respects to **Grid discipline and Grid reliability** of each South Asian Countries both from the perspective of **integration/unification of regional grids** of domestic power system of a country as well as **cross border power grid integration**.

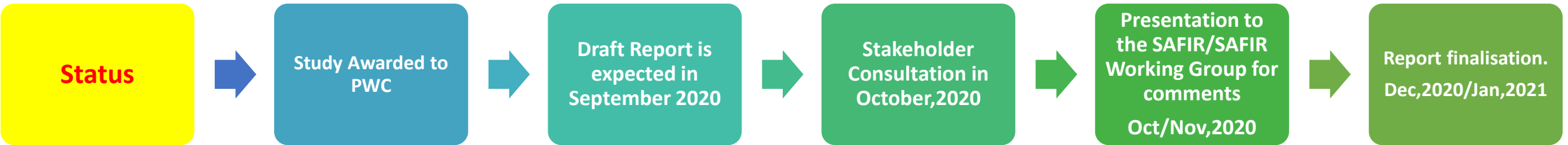
Deliverables:



Detailed set of **Regulatory measures/Intervention** and Mechanism needed for enhancing **Grid discipline & Grid reliability** in SA region along with **detailed explanatory memorandum**.



Roadmap (regional and country wise) and action plan for implementation of above suggested Regulatory measures /Intervention.



A3 Study on Cross Border Trade of Electricity- Potential Optimum Utilisation and Reduction in Cost of Supply

<p>2nd Meeting of SAFIR working group {Dhaka, 4th December, 2020}</p>	<p>2nd Meeting of SAFIR working group {Dhaka, 4th December, 2020}</p>	<p>18th ECM Meeting {5th December 2019}</p>	<p>18th ECM Meeting {5th December 2019}</p>
<p>{Overall Renewable energy Growth Scenario and opportunity for Regional Grid Balancing was discussed}</p>	<p>{It was decided to take up another study on the requirement of balancing generation on a regional basis and develop a report for the same.}</p>	<p>{Chairman of SAFIR/BERC suggested that the Working Group should also consider working on methods to reduce the cost of supply. This could be added as an objective in the Study on Cross Border Trade in Electricity}</p>	<p>{ It was also suggested that the Working Group could assess as to how balancing costs can be reduced due to the flexibilization of thermal power so that there is no economic loss }</p>

In the above context, SARI/EI is revising/expanding scope of the TOR of “Study on Cross Border Trade of Electricity...” to make the study **holistic, comprehensive, more analytical and taking in to account the renewable energy and grid balancing aspects, ancillary service** etc. in a integrated manner





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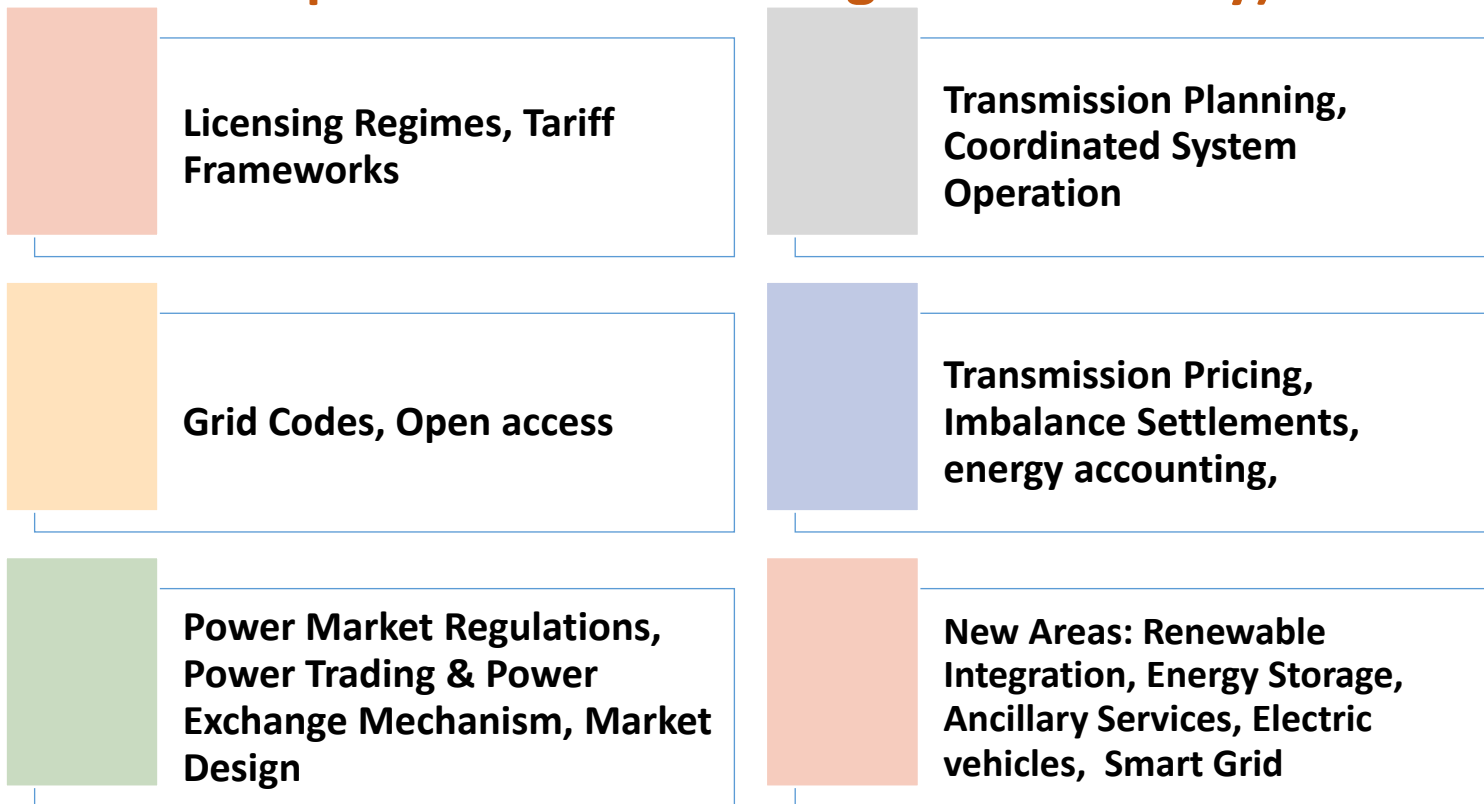
IRADe Integrated Research and
Action for Development

B South Asia Energy Sector **Training & Capacity Building program** on energy regulation for Energy Cooperation & exchange of electricity in South Asia



B South Asia Energy Sector Training & Capacity Building program on energy regulation for Energy Cooperation & exchange of electricity in South Asia

Key Topics to be Covered (Regulatory Aspects of Energy Cooperation and exchange of electricity)

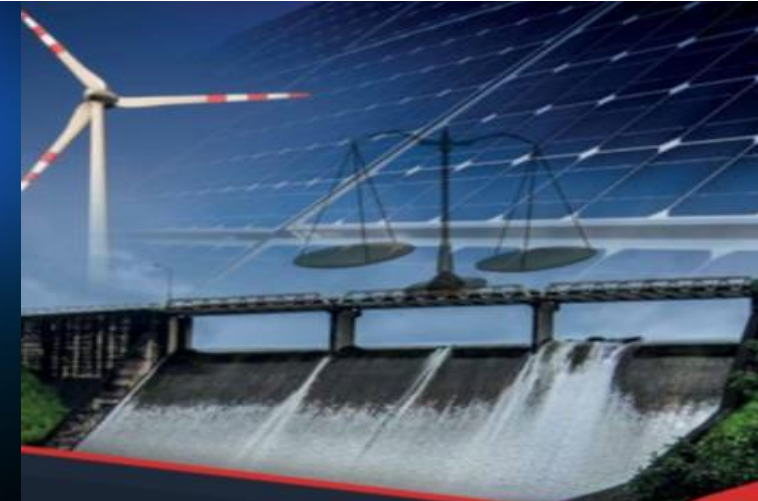




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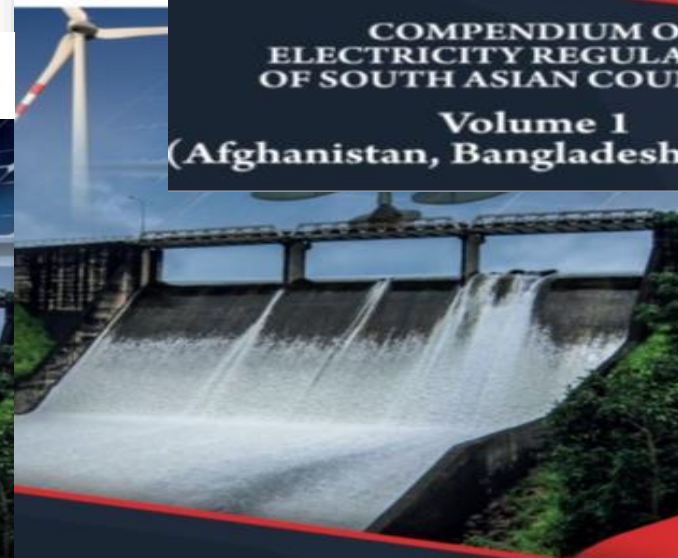
C South Asia
Electricity
Regulatory
Compendium



**COMPENDIUM OF
ELECTRICITY REGULATIONS
OF SOUTH ASIAN COUNTRIES**
Volume 1
(Afghanistan, Bangladesh & Bhutan)



**COMPENDIUM OF
ELECTRICITY REGULATIONS
OF SOUTH ASIAN COUNTRIES**
Volume 2
(India & Maldives)



**COMPENDIUM OF
ELECTRICITY REGULATIONS
OF SOUTH ASIAN COUNTRIES**
Volume 3
(Nepal, Pakistan & Sri Lanka)



C South Asia Electricity Regulatory Compendium

Compendium (A first of its kind in SA) has been prepared

Released in the SAFIR Conference 19th February, 2020, New Delhi

Compendium-Comprehensively Captures all aspects (Three Volumes)

Primary Legislation, Key Policies, Guidelines

Regulations

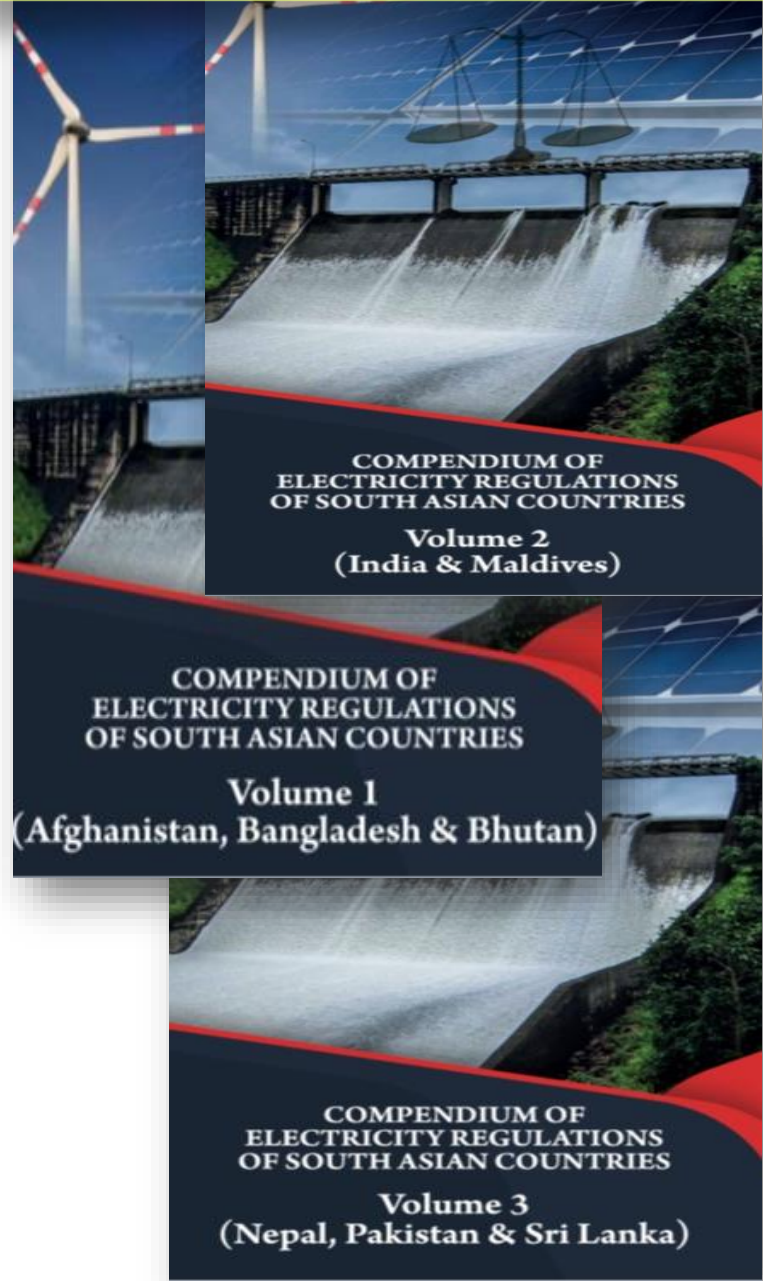
Technical Standards

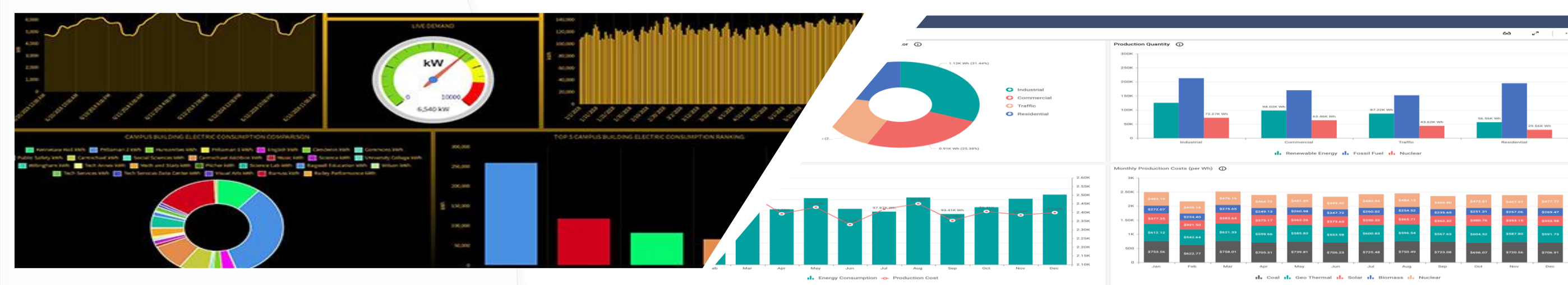
Grid Code, Transmission Pricing, Open Access,

Power Trade & Markets, Cross Border Electricity Trade

Licensing, Generation and Transmission Tariffs

Six Monthly Updating & Yearly Edition





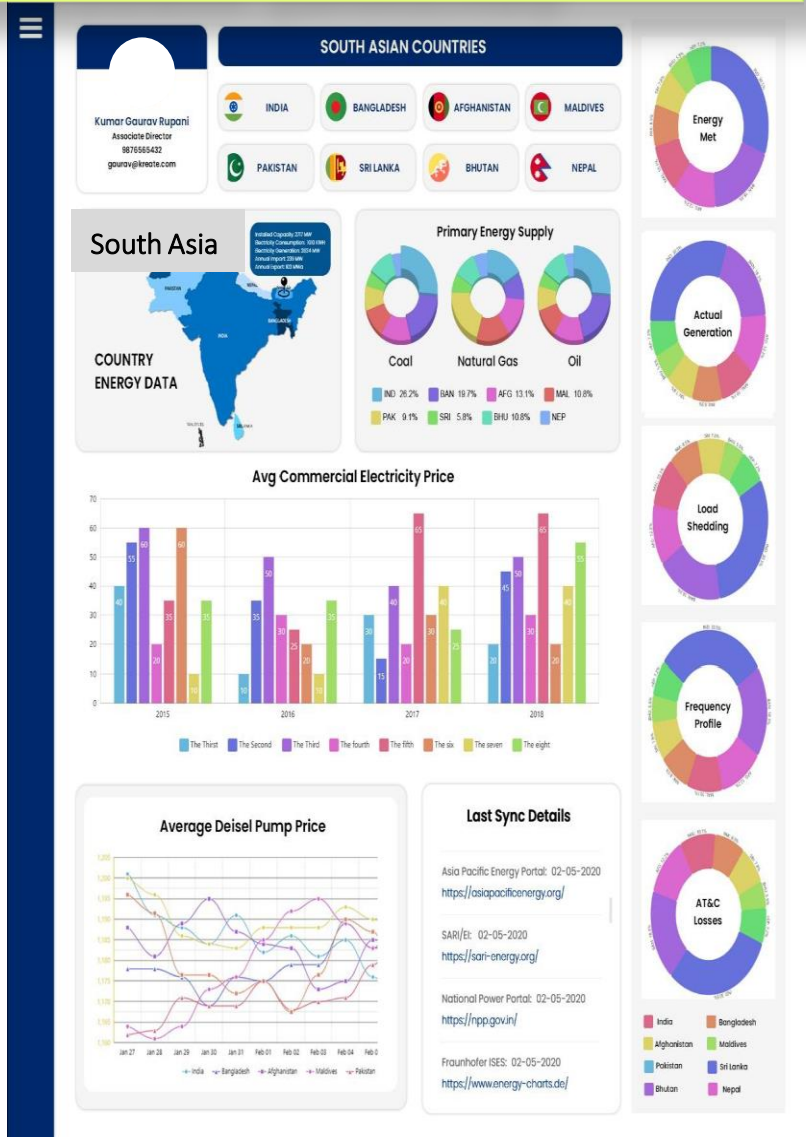
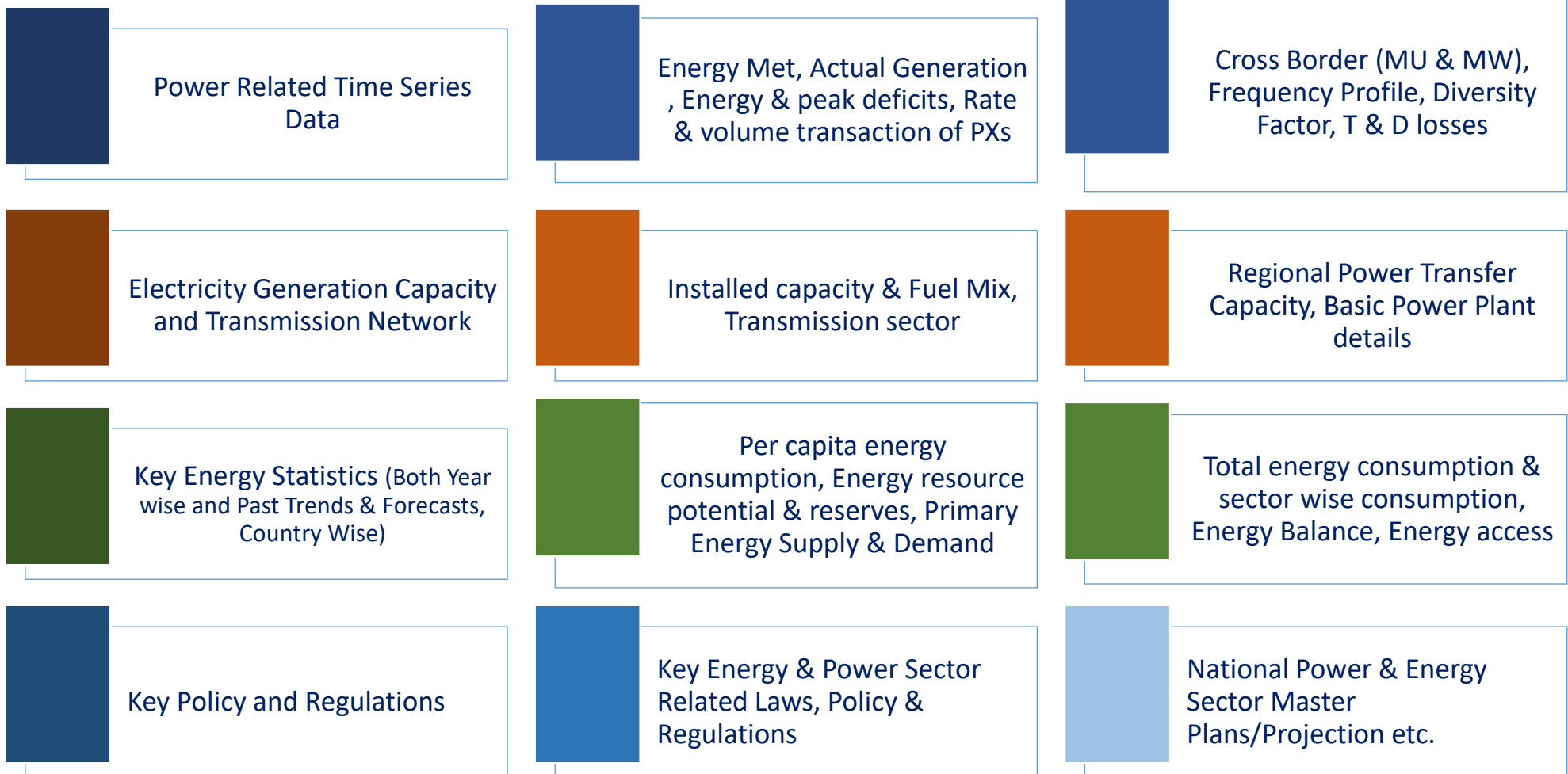
D South Asia Energy/Electricity Knowledge Resource Database (**SAKERD**)



D South Asia Energy/Electricity Knowledge Resource Database (SAKERD)

Aims to Create a Comprehensive Energy/Electricity Sector Data Base

{Online, user friendly, data Analytic, Indicative Graphs, pie charts and Figures, Info graphics, Annual Energy Data Book }





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E SAFIR Regulatory News Letter (**SRNL**)



E SAFIR Regulatory News Letter (SRNL)



Regulatory updates & Policy Developments in the Region



Analysis on the Energy Regulatory and Policy Developments



Will capture Important development, can have Guest Columns outside of the Region



It includes power, oil and gas sector



To be circulated in SA Countries in electronic format. (Quarterly)

Status



Concept Note, Draft Template & Format by SARI/EI by September 2020



Sharing the Concept Note, Draft Template & Format with SAFIR, September 2020



Finalisation of Concept Note, Draft Template & Format, Octobre, 2020



Issue of First Go live, November 2020

F SAFIR Working Group Meeting



F SAFIR Working Group Meeting



First Meeting of
SAFIR Working
Group

15th-16th May,
2018

Colombo, Sri Lanka



Second SAFIR Working
Group meeting

4th December 2019
Dhaka, Bangladesh



Third SAFIR Working
Group meeting
(Virtual)

November, 2020



Fourth SAFIR Working
Group meeting

Sri Lanka, January,
2021

Organising two/three meetings of SAFIR Working Group in a year

Continuous Interaction: Regular meetings are essential for ensuing a Consultative & participatory process



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Other Cooperation with SAFIR

Common Minimum Grid Code (CMGC), SAFIR Conference

Common Minimum Grid Code (CMGC): Objective

- The Common Minimum Grid Code for South Asia : lays down the **rules, guidelines and standards** to be followed by various South Asia country participants in the system for cross border trading in electricity, while operating the power system, in the **most secure, reliable, economic and efficient** manner.



*Facilitation of cross border trading of power, while **ensuring secure, reliable, economic and efficient** operation of the grid.*



*Facilitation of the **coordinated optimal** operation of the South Asian Grid.*



*Facilitation of **coordinated and optimal** maintenance planning of generation and transmission facilities in the South Asian grid.*



Common Minimum Grid Code (CMGC): Progress

SARI/EI Drafted CMGC and shared with all Regulators & stakeholders of SA countries

Conducted Stakeholder Consultation in Bangladesh, Bhutan, Nepal

Presented CMGC in the 2nd meeting of SAFIR Working Group (Dhaka, 4th Dec, 2020) & in the 18th ECM Meeting (5th December 2019)

18th ECM recommended that each member country may form a Grid Code Review Committee consisting of all the stakeholders to discuss various features of the draft CMGC

SARI/EI/IRADe were requested to do more detailed and comprehensive consultation with the grid code review committee of each country as well as with all stakeholders (utilities, system operators, planners, regulators and policy makers etc.)

Next Step

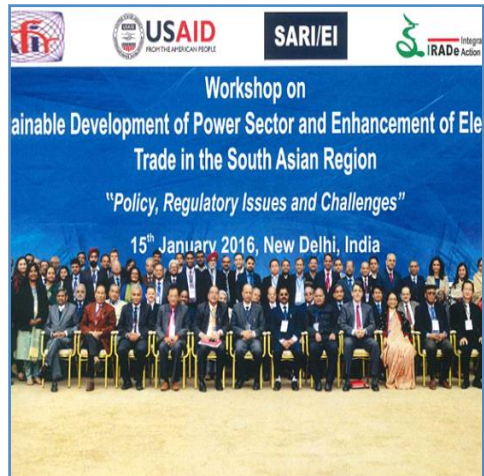
First Consultation with grid code review committees

More Detailed Consultation with utilities, system operators, planners, regulators and policy makers etc

Second Consultation with grid code review committees and Finalisation of Draft

Submission of Revised CMGC to the Chairperson of Regulatory Commissions of SA Countries

SARI/EI Partnership for SAFIR Conference



SARI/EI has successfully partnered with SAFIR for the Annual SAFIR Conference in the year 2016 & 2020



CLDP, SAFIR and SARI/EI Workshop on "Power Pool Governance and Interconnection" -Le Meridien Hotel April 25-26 2019 New Delhi, India



SAFIR Conference on "Regional Energy Integration & Cross Border Energy Trade: A New Renaissance for Growth & Development of South Asia Region, 19th February 2020,

Key Topics Covered in the last Conference

Regulatory and Policy Frameworks for Deeper Energy/Electricity Integration, Advancing Cross Border Energy Trade in South Asia.

Strategy for Transitioning South Asia from Bilateral to Trilateral and Multilateral Power Trade and Development of Competitive Regional Power Market in the South Asia Region.

Creating Conducive Environment for Investment framework in Regional Energy Infrastructures Projects in South Asia



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Thank You