

The background of the slide is a photograph of a renewable energy farm. In the foreground, there are rows of solar panels. In the middle ground, a large white wind turbine with red-tipped blades stands prominently. The background features rolling green hills under a bright blue sky with scattered white clouds.

# Asia Clean Energy Forum 2025

## *Powering South Asia's Clean Energy Future: RCI in the Energy Sector*

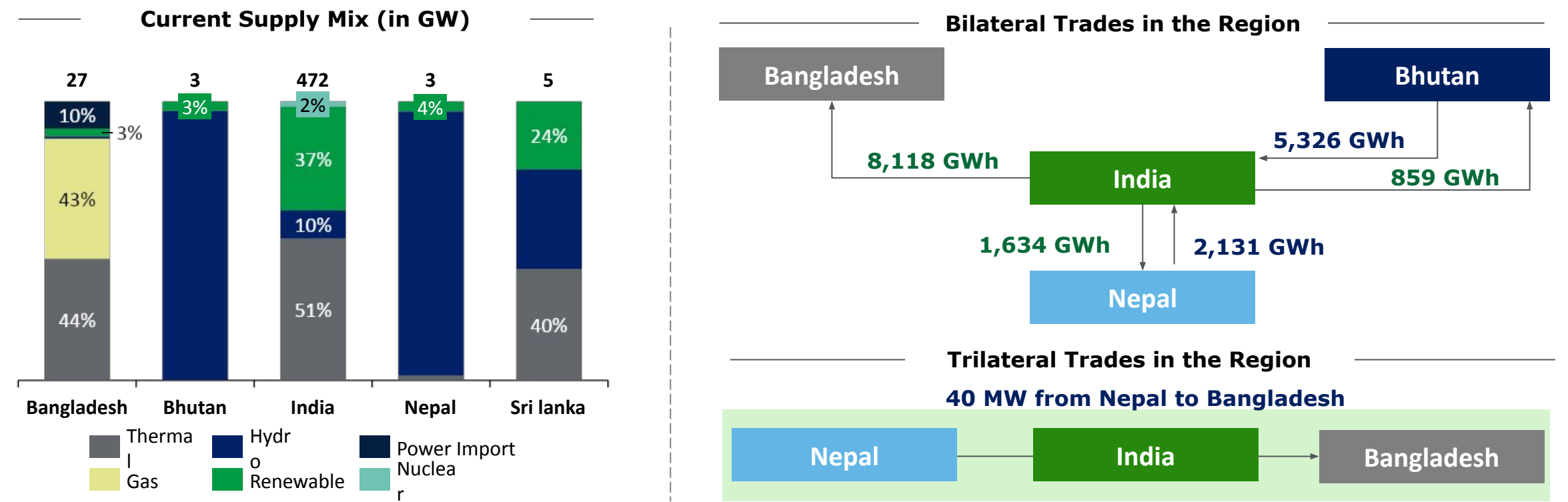
Siddharth Mani, Director, Deloitte Touche Tohmatsu India LLP

June 2025



# Power Trade in South Asia: Untapped!

BBINS countries have over 500 GW of installed capacity—yet traded power accounts for barely 1% of combined generation, with fossil fuels still dominating.



- Majority of the electricity trade in BBINS are bilateral in nature. Trade contracts are largely project based or under G2G models
- Recent Trilateral Agreement between Nepal, India and Bangladesh was operationalized with 40 MW trade taking place between Nepal and Bangladesh – a landmark moment.

# Decarbonization and Growth: A Common Destination

Installed capacity is set to double by 2035, driven by a shift to renewables. Regional integration is emerging as a core strategy across national energy plans.

Country	Projected Installed Capacity by 2035 (GW)							NDC Target (2030)	Decarbonization and Growth Strategies		
Bangladesh	10.04	32.95			3.74	0.93	3.1	10.56	68 GW	21.85% GHG reduction (conditional + unconditional)	<div><input type="checkbox"/> Natural Gas/ LNG</div> <div><input type="checkbox"/> Solar</div> <div><input type="checkbox"/> Nuclear</div> <div><input checked="" type="checkbox"/> Import</div>
Bhutan	17.13							3.13	20 GW	Carbon neutral (already achieved)	<div><input type="checkbox"/> Export-led hydro</div> <div><input type="checkbox"/> Solar</div> <div><input type="checkbox"/> Green hydrogen</div>
India	203	20	61	310		266		38	898 GW	45% emissions intensity reduction; 500GW RE by 2030	<div><input type="checkbox"/> Solar</div> <div><input type="checkbox"/> Wind</div> <div><input type="checkbox"/> Energy Storage</div> <div><input checked="" type="checkbox"/> Import / Export</div>
Nepal	25.65							2.85	29 GW	Net-zero by 2045; 15% GHG cut by 2030	<div><input type="checkbox"/> Export-led hydro</div> <div><input type="checkbox"/> Solar</div> <div><input type="checkbox"/> Green hydrogen</div>
Sri Lanka	1.31	1.53	2.16	5.18		1.62	1.59		13 GW	70% renewable electricity by 2030	<div><input type="checkbox"/> Solar, wind, energy storage biomass, coal phase-out</div>
<div><div></div> Coal</div> <div><div></div> Gas</div> <div><div></div> Liquid Fuel</div> <div><div></div> Hydro</div> <div><div></div> Solar</div> <div><div></div> Wind</div> <div><div></div> Nuclear</div> <div><div></div> Others</div>											

# Regional Cooperation and Integration: A Win-Win Pathway

Stronger RCI can enhance energy security, optimize resources, and address country-specific constraints—delivering shared benefits across the region.

## Regional Benefits of RCI



### Impact on Unmet Demand

- Counter dry-season deficits
- Eliminate power shortages through resource pooling in the region due to generation complementarity



### Impact on Excess Generation

- Ability to export excess generation and plan to cater to markets with higher variable costs
- Avoid spillages in wet season



### Impact on Emission Reduction

- Regional Clean Energy Trade helps offset emissions for thermal dominant countries
- Provides opportunity to earn through carbon trading / carbon market mechanisms



### Enhancing Flexibility

- Resource Pooling helps offset costs due to diminishing the need for high-cost, high-ramp-rate generators enhancing flexibility for planners

## Country specific benefits

### India

- Rapidly increasing RE Portfolio will require power for base load as well as balancing
- Emission reduction from thermal

### Bangladesh

- Utilize regional clean energy portfolio to meet decarbonization targets
- Offset high cost imported fuel through cheaper electricity imports

### Nepal and Bhutan

- Utilize surplus hydropower for exports
- Dry season deficits managed through imports
- Domestic electrification helps forex outgo

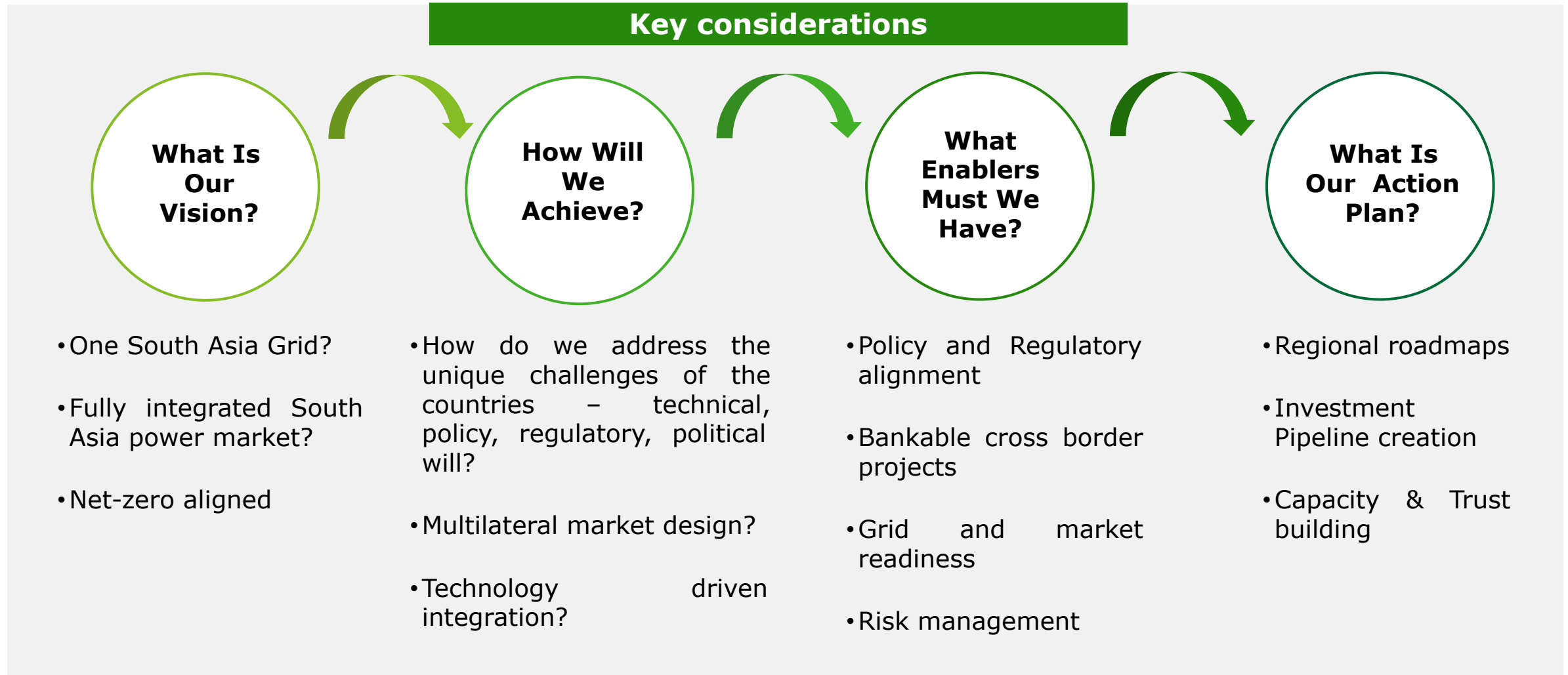
### Sri Lanka

- Increase Grid Reliability through interconnections and access to power market
- Reduce reliance on imported fuel



# From Ambition to Action: Realizing South Asia's RCI Potential

What will it take to unlock transformative value from regional cooperation? Let's explore the enablers, priorities, and partnerships that can move us forward—together.





**Deloitte** refers to one or more of Deloitte Touche Tohmatsu Limited, a UK private company limited by guarantee (“DTTL”), its network of member firms, and their related entities. DTTL and each of its member firms are legally separate and independent entities. DTTL (also referred to as “Deloitte Global”) does not provide services to clients. Please see [www.deloitte.com/about](http://www.deloitte.com/about) for a more detailed description of DTTL and its member firms.

This material has been prepared by Deloitte Touche Tohmatsu India LLP (“DTTI LLP”), a member of Deloitte Touche Tohmatsu Limited, on a specific request from you and contains proprietary and confidential information. This material may contain information sourced from publicly available information or other third -party sources. DTTI LLP does not independently verify any such sources and is not responsible for any loss whatsoever caused due to reliance placed on information sourced from such sources. The information contained in this material is intended solely for you. Any disclosure, copying or further distribution of this material or its contents is strictly prohibited.

Nothing in this material creates any contractual relationship between DTT ILLP and you. Any mutually binding legal obligations or rights may only be created between you and DTTI LLP upon execution of a legally binding contract. By using this material and any information contained in it, the user accepts this entire notice and terms of use.

**©2025 Deloitte Touche Tohmatsu India LLP. Member of Deloitte Touche Tohmatsu Limited**

Deloitte Touche Tohmatsu India Private Limited (U74140MH199 5PTC093339), a private company limited by shares, was converted into Deloitte Touche Tohmatsu India LLP, a limited liability partnership (LLP Identification No. AAE-8458),with effect from October 1, 2015.