

# Financing Clean Energy Transition in South Asia

**October 23, 2024**  
**9:45AM – 11:15AM**



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# Financing Clean Energy Transition in South Asia

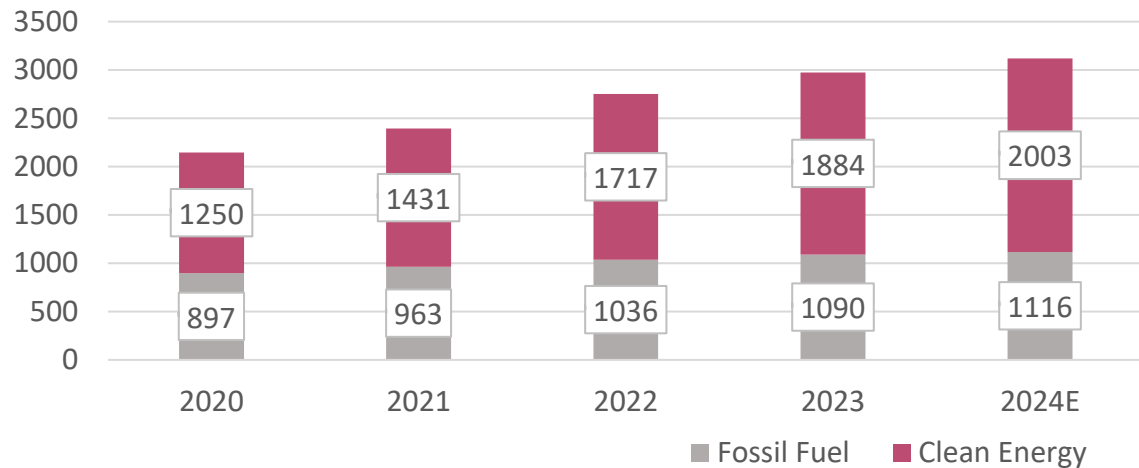
Investment Landscape for Clean Energy  
Transition in South Asia

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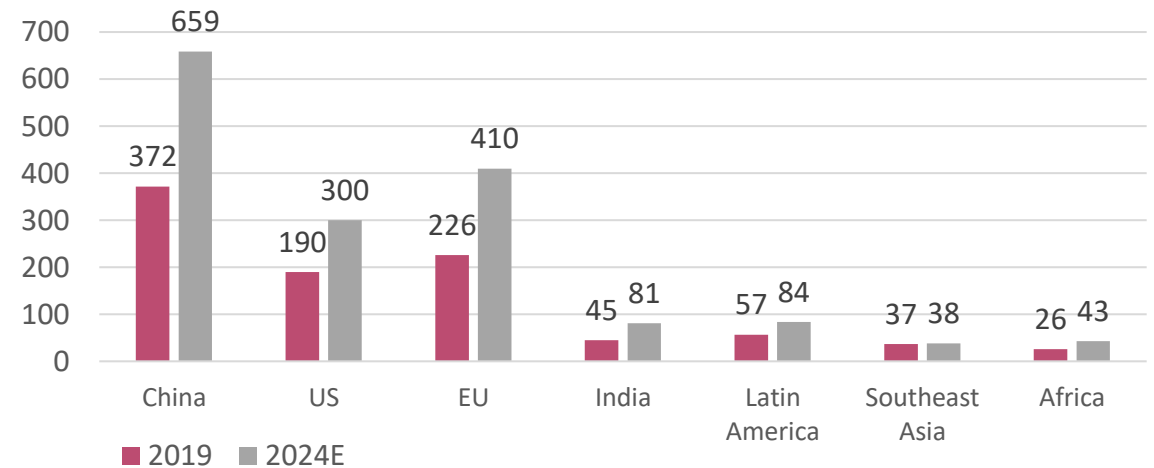


## Developing and emerging economies account for only one-fifth of global investments in clean energy

Global Investments – Clean Energy vs Fossil Fuels (USD bn)



Clean Energy Investments by Region (USD bn)



Highest ever energy investments in 2024 at \$3 trillion



- 2/3rd of the investment, \$2 billion in clean energy\*
- Acceleration in investments in clean energy from 2020 onwards

Regional imbalances and shortfalls



- Emerging, developing economies only account for 15% of global investments#
- Investments not commensurate with growing energy needs

IEA

\*renewables, electric vehicles, nuclear power, grids, storage, low-emissions fuels, efficiency improvements and heat pumps

#includes Africa, Europe, Latin America, the Middle East, and Asia, ex China

## South Asia is growing rapidly, and Clean Energy Transition in an ambitious task



### Growth Stats

The region's economy is growing at **6.4%** per year, energy demand has increased 50% since 2000<sup>1</sup>



### Emissions

While per capita emissions are very low, Asia accounts for **44%** of GHG emissions globally<sup>2</sup>



### Energy Mix

Around **80%** of energy generation in South Asia is from non-renewable sources<sup>3</sup>



### Climate Change

In the past two decades, more than **50%** South Asians have been affected by at least one natural disaster<sup>4</sup>

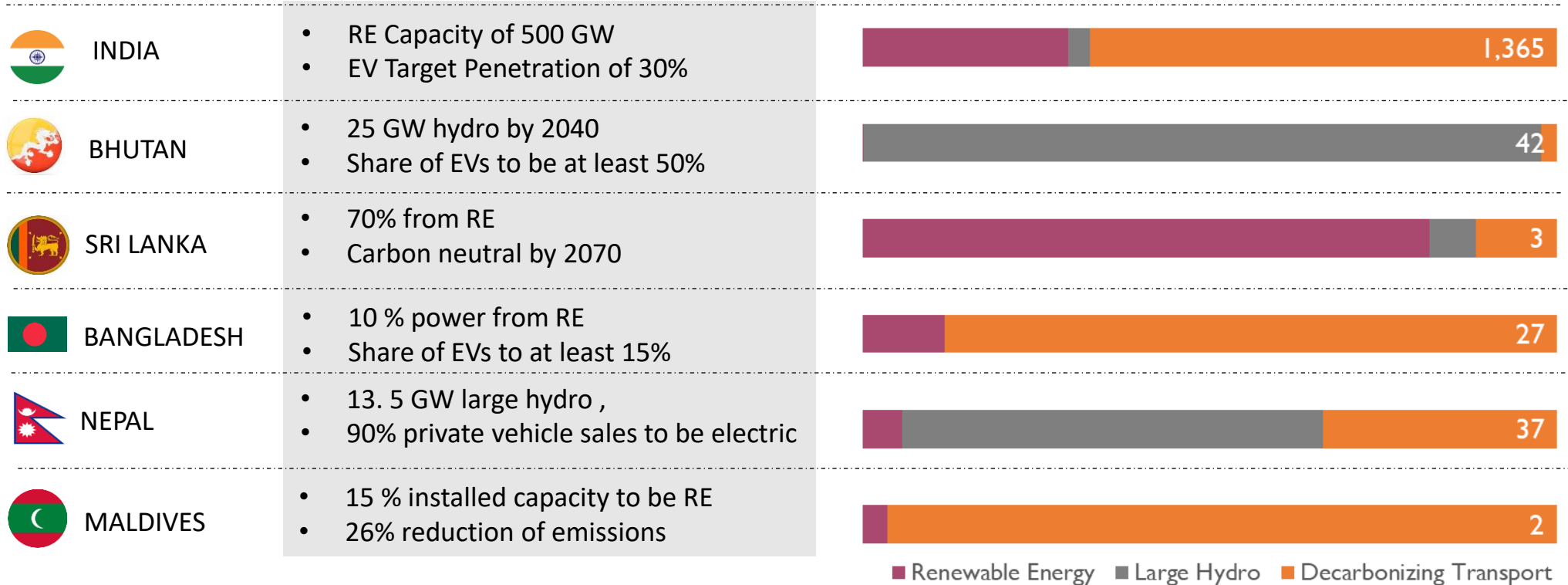


### NDC Goals

Emission reduction targets to be met through RE generation, e-mobility, energy efficiency measures<sup>5</sup>

## South Asian Region's Nationally Determined Contributions by 2030 and Investments required

USD Billion



**South Asia's committed goals around clean energy require a significant investment, around USD 1.5 trillion by 2030**

There are a myriad of global investors financing clean energy in South Asia, supplementing domestic investments

## Equity Investors



Global Investment Funds



Oil & Gas Majors



Foreign Utilities



Indian Conglomerates



Patient Capital Providers

## Debt Investors



International Banks



Public Sector Banks



Private Sector Banks



Infrastructure Finance Cos.



Development Finance Org.

## Financing Clean Energy, especially cross-border, involves numerous risks and challenges

### Country Risk

Risk of adverse movements in currency, sovereign ratings downgrade especially in debt transactions

### Political and Regulatory Risk

Risk from political changes or instability or changes to key regulations

### Data and Disclosures

Data availability to fulfill sustainability related disclosures requirements































### Offtake Arrangement

Revenue risk from lack of agreements for sale of output

### Technology Risk

Uncertainty in predicting returns from new technologies

**Clean energy sectors are at different levels of maturity and face varied challenges**

Sector	Development Timeline	Revenue risk	Regulatory Uncertainty	Counterparty Risk	Technology/ Performance
Solar					
Wind					
BESS					
E-mobility/EVCI*					
Green Hydrogen					
Energy Efficiency					

\*EV Charging Infrastructure

High Risk      Low Risk



## Cost of capital for emerging economies is higher than advanced economies, adding to the clean energy transition challenges



Factors like currency risk, country risk, regulatory risk, can add 20%-30% to the overall cost of capital

As an example, cost of capital for solar PV and storage projects (9-13%) is at least twice that in advanced economies ([IEA](#))

### Innovative financing structures are needed to reduce cost of capital for energy transition in South Asia

#### Co-lending



Partnership among lenders, combining complementary strengths

#### Guarantees



Coverage of non-commercial risks to enhance cross border investments

#### Blended Finance



Combination of development and commercial finance

#### Green labelled finance



Green bonds and green loans linked to sovereign taxonomies

#### Insurance



Insuring performance risk of clean technologies, like energy efficiency

## Recent transactions in clean energy showcase the positive trends in investments in the South Asian region



ADB and AIIB are extending funding of **\$100 million** to JBM ECOLIFE Mobility for deployment of 650+ electric buses across India

US DFC has extended a **\$16.5 million** guarantee to Ecozen Solutions for expanding solar powered pump controllers and off-grid cold storage businesses for farmers

DGPC and SBI have executed an **INR 14 billion** loan agreement for development of hydropower and solar energy projects, as well as the rehabilitation of existing hydropower plants in Bhutan

IREDA is investing **INR 2.9 billion** in a 900 MW hydroelectric power project in Nepal

ADB and the Government of Maldives have signed loan and grant agreements of up to **\$50.5 million** to expand renewable energy generation and distribution in Maldives