



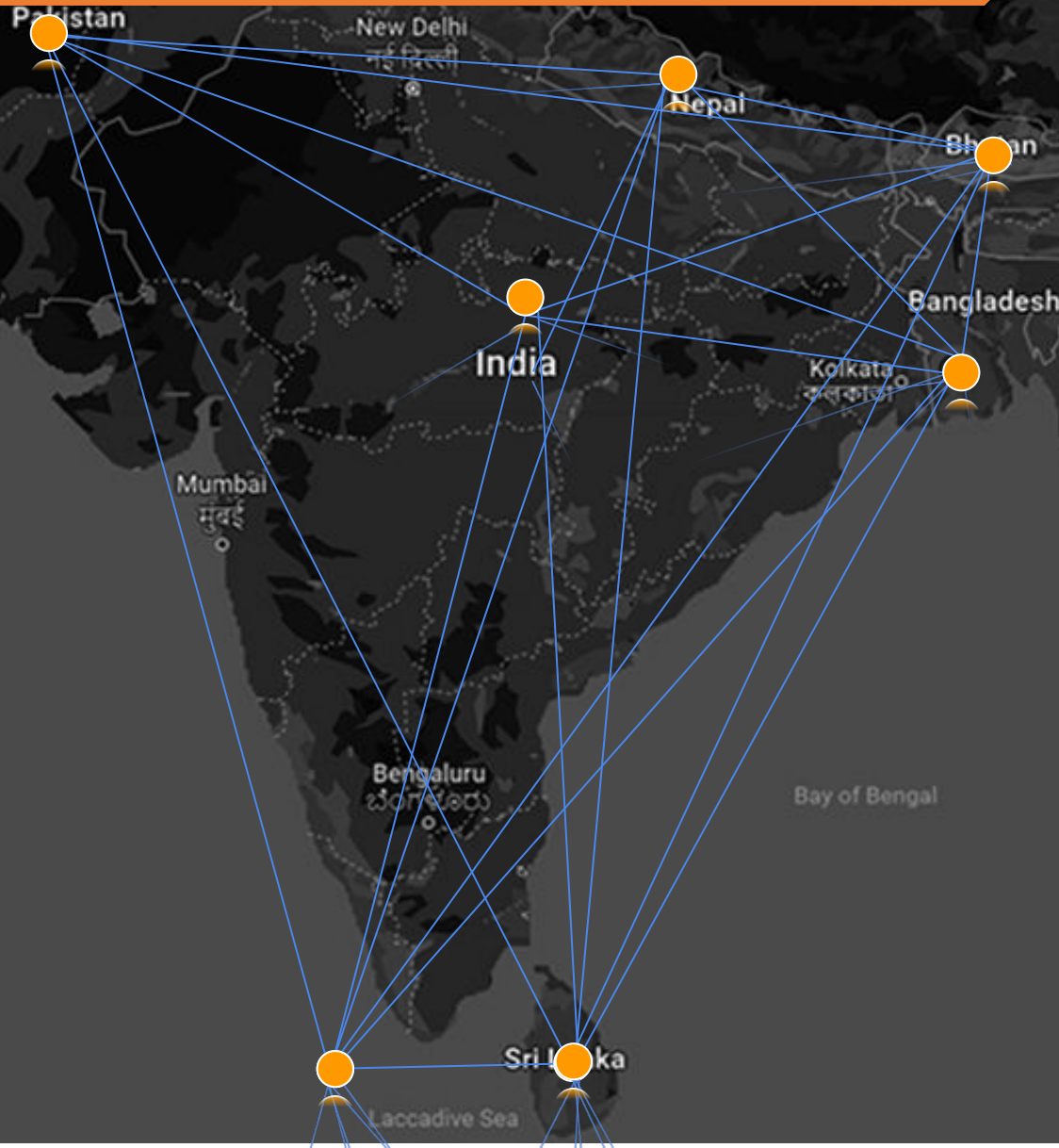
Campaign for
Just & Equitable Transition
In South Asia

PATHWAYS TO **TRIPLING RENEWABLE ENERGY** IN SOUTH ASIA

Hasan Mehedi

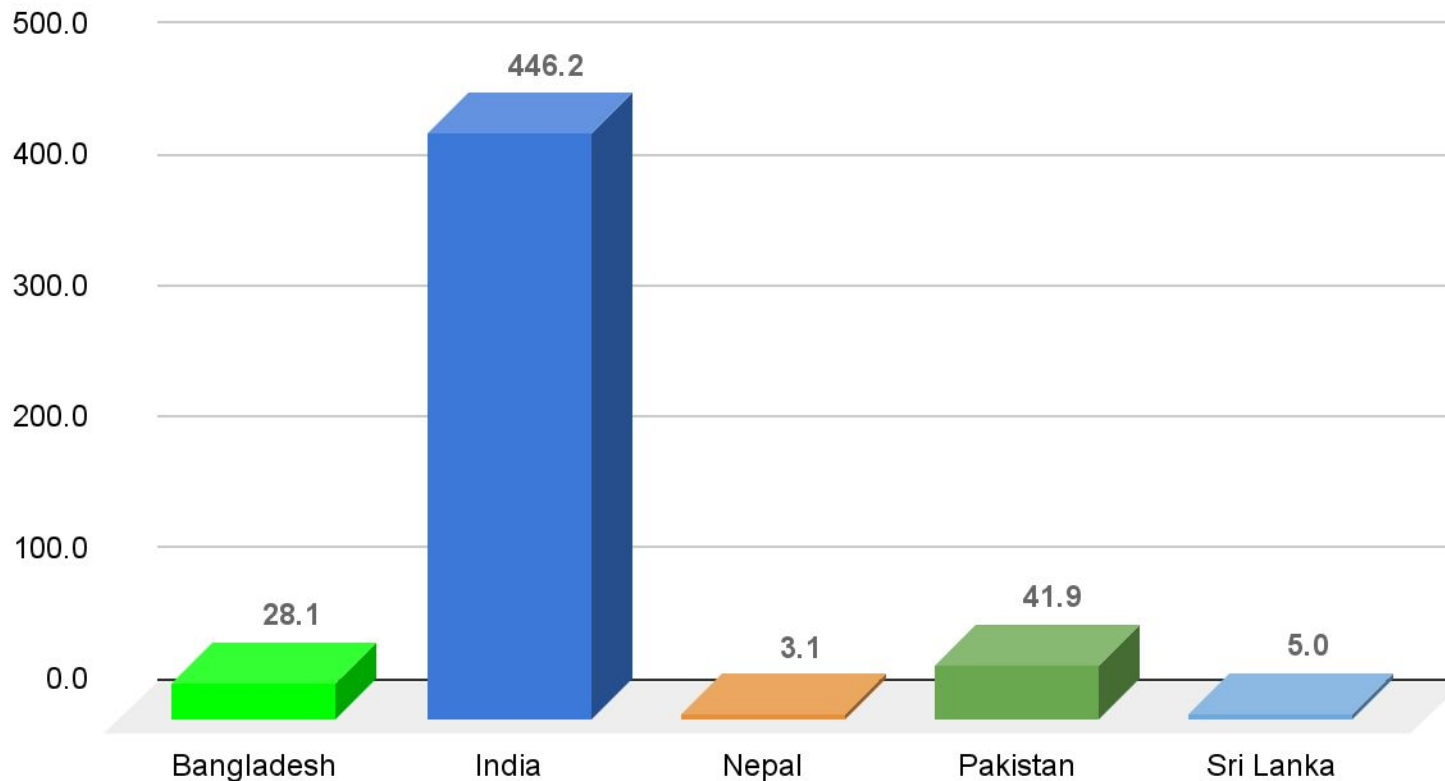
Coastal Livelihood and Environmental Action Network (CLEAN)

South Asia



- South Asia is a highly populated region with 1.93 billion people, which is 27% of the world.
- Average per capita GDP in South Asia is USD 2,458, which is one of the lowest among the developing countries.
- The average per capita electricity consumption is only 656 kWh, which is 74% less than the developing Asia and 80% less than the global average.
- The countries have enough resources to install 63.8 TW of Solar and 31.4 TW of wind power together which can fulfill the total energy demand of the sub-region.
- South Asia is one of the regions proposed a regional grid to share renewable energy with each other.

Installed Capacity

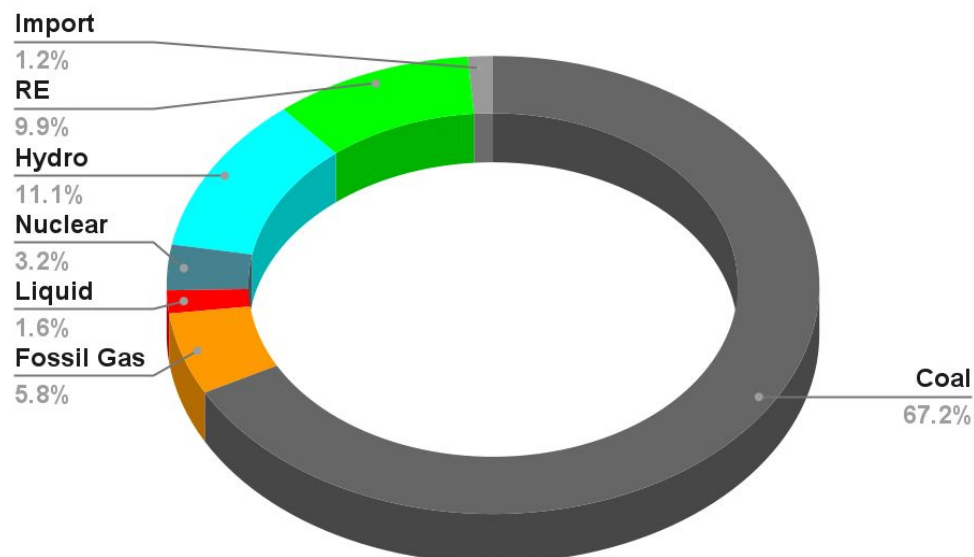


The total installed capacity in the power sector of the region is **524.3 Gigawatt (GW)** where India has 446.2 GW, followed by Pakistan (41.9 GW), Bangladesh (28.1 GW), Sri Lanka (5 GW) and Nepal (3.1 GW).

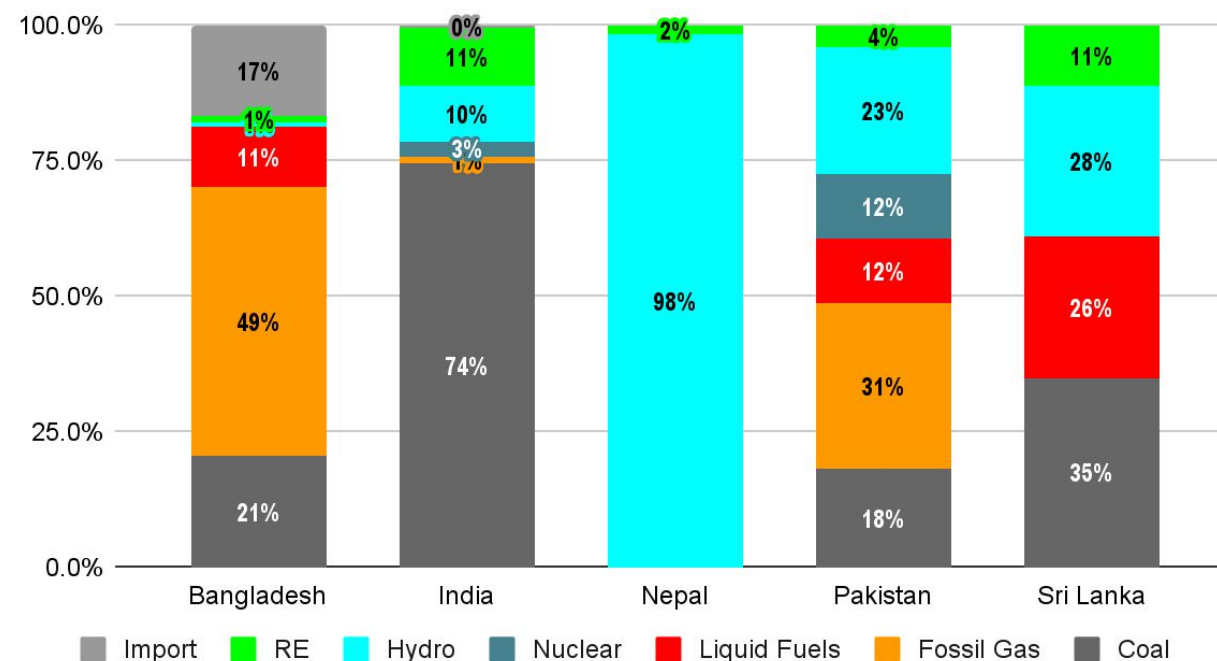
Power sector of **India is 6 times bigger** than the combined capacity of other four countries.

All of the countries have achieved **around 100% electricity coverage** by 2023, except Nepal (95.4%). However, access to **quality electricity** is still a big issue.

Energy Mix



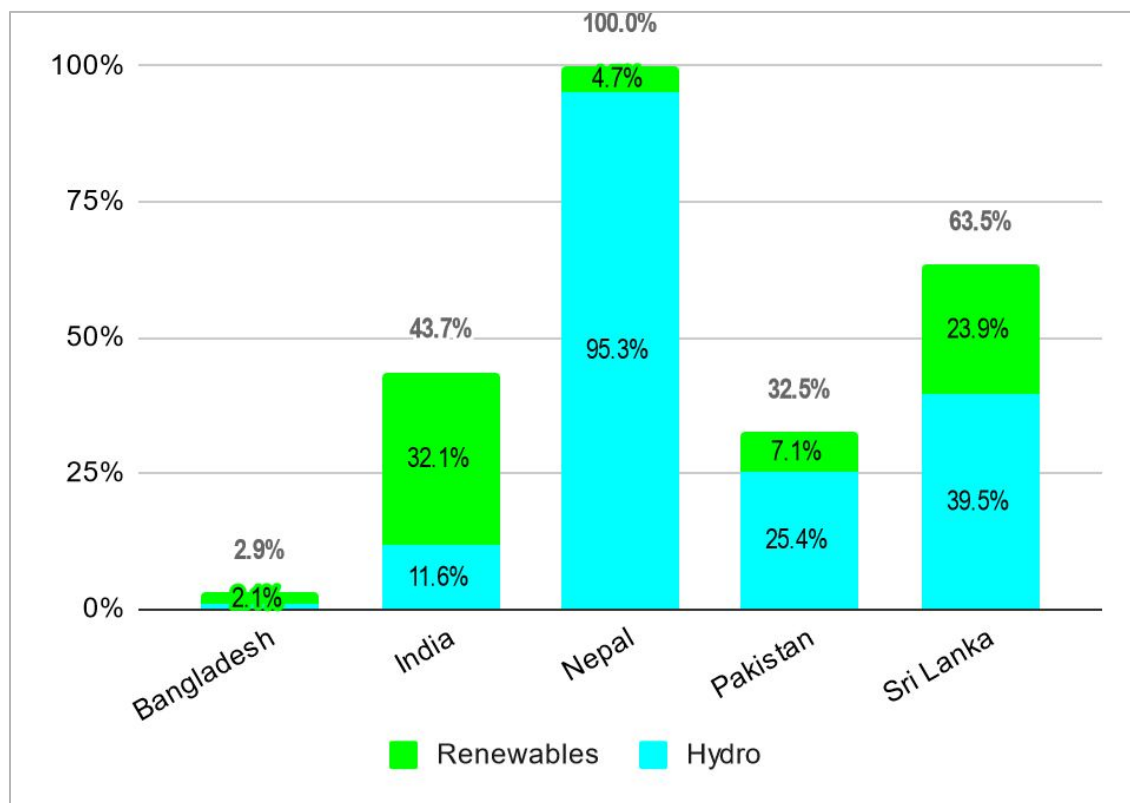
From generation point, 67% of the electricity generated from coal, 6% from fossil gas, 1.6% from liquid fuels, 3.2% from nuclear, 11% from hydro and only 9.9% from RE Sources.



India leads the coal power generation with 74%, followed by Sri Lanka (35%), Bangladesh (21%) and Pakistan (18%). On the other hand 50% of electricity in Bangladesh comes from Gas, followed by Pakistan (31%) and India (1.5%).

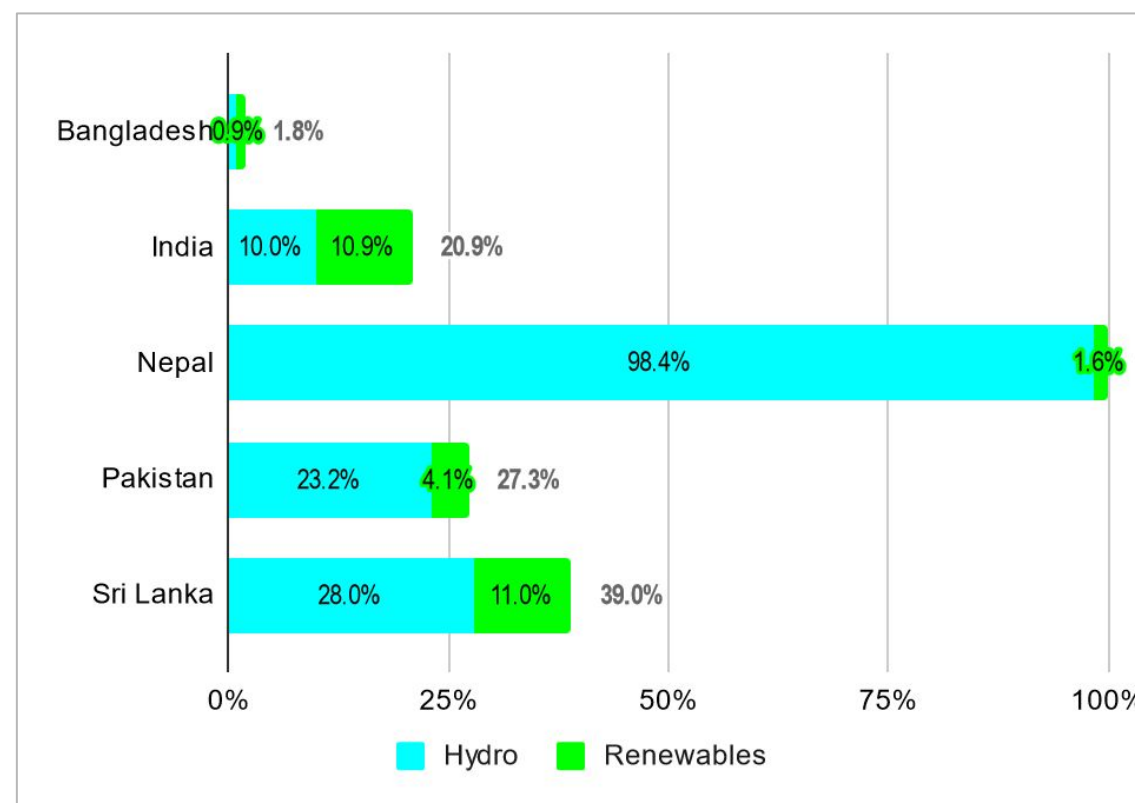
RE: Current Status

Installed Capacity



Hydropower is not considered as Renewables due to its high emission and severe socio-environmental impacts. But countries like Nepal, Pakistan and Sri Lanka is highly dependent on Hydropower for energy.

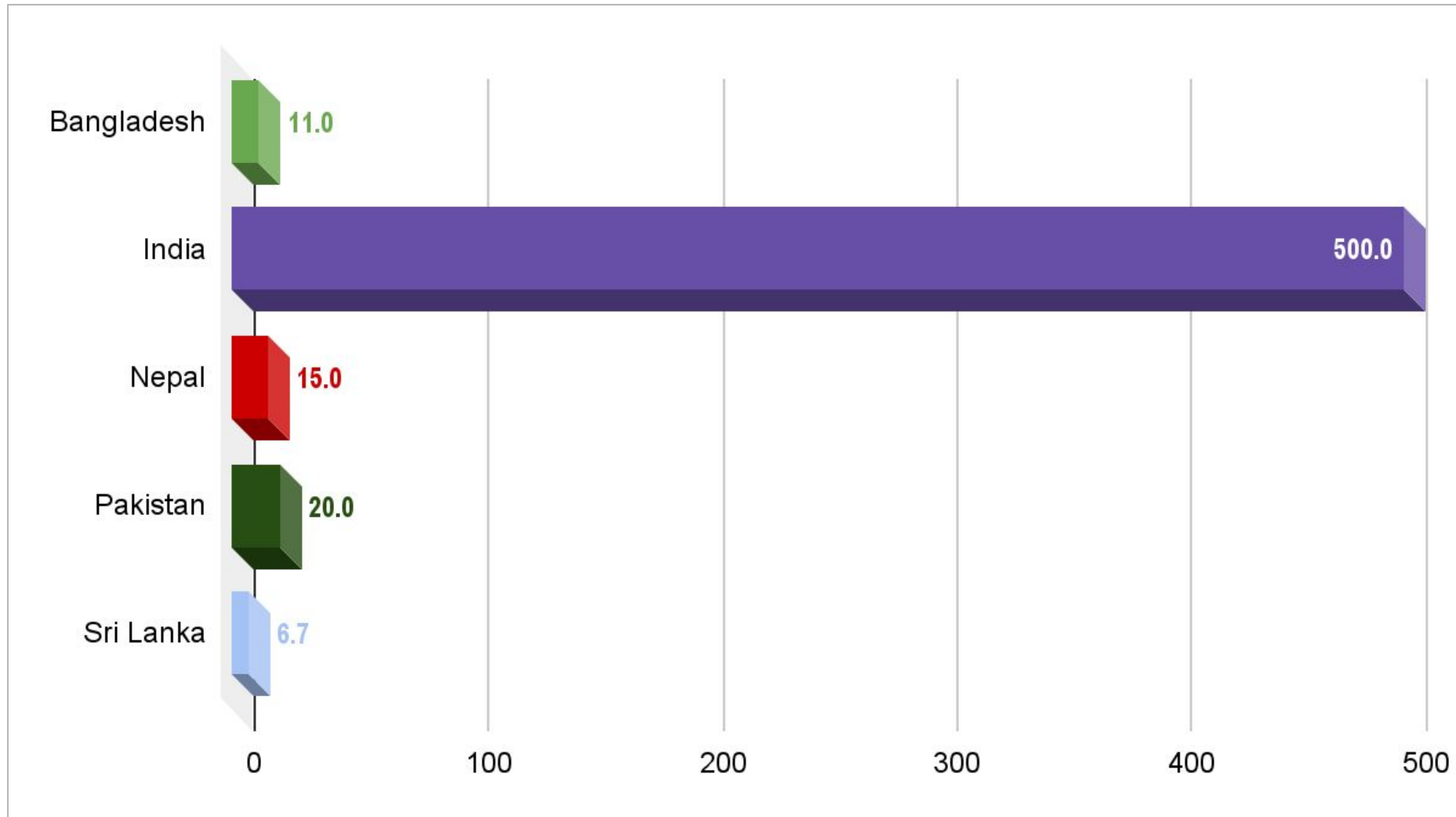
Actual Generation



If we do not consider Hydropower, the contribution of Renewable energy in energy generation is very low. It contributes only 0.9% in Bangladesh, 1.6% in Nepal, 4.1% in Pakistan, 10.9% in India and 11% in Sri Lanka.

Future Targets

In Gigawatt (TW)



The total target of Renewables is 552.7 Gigawatt in South Asia by 2030.

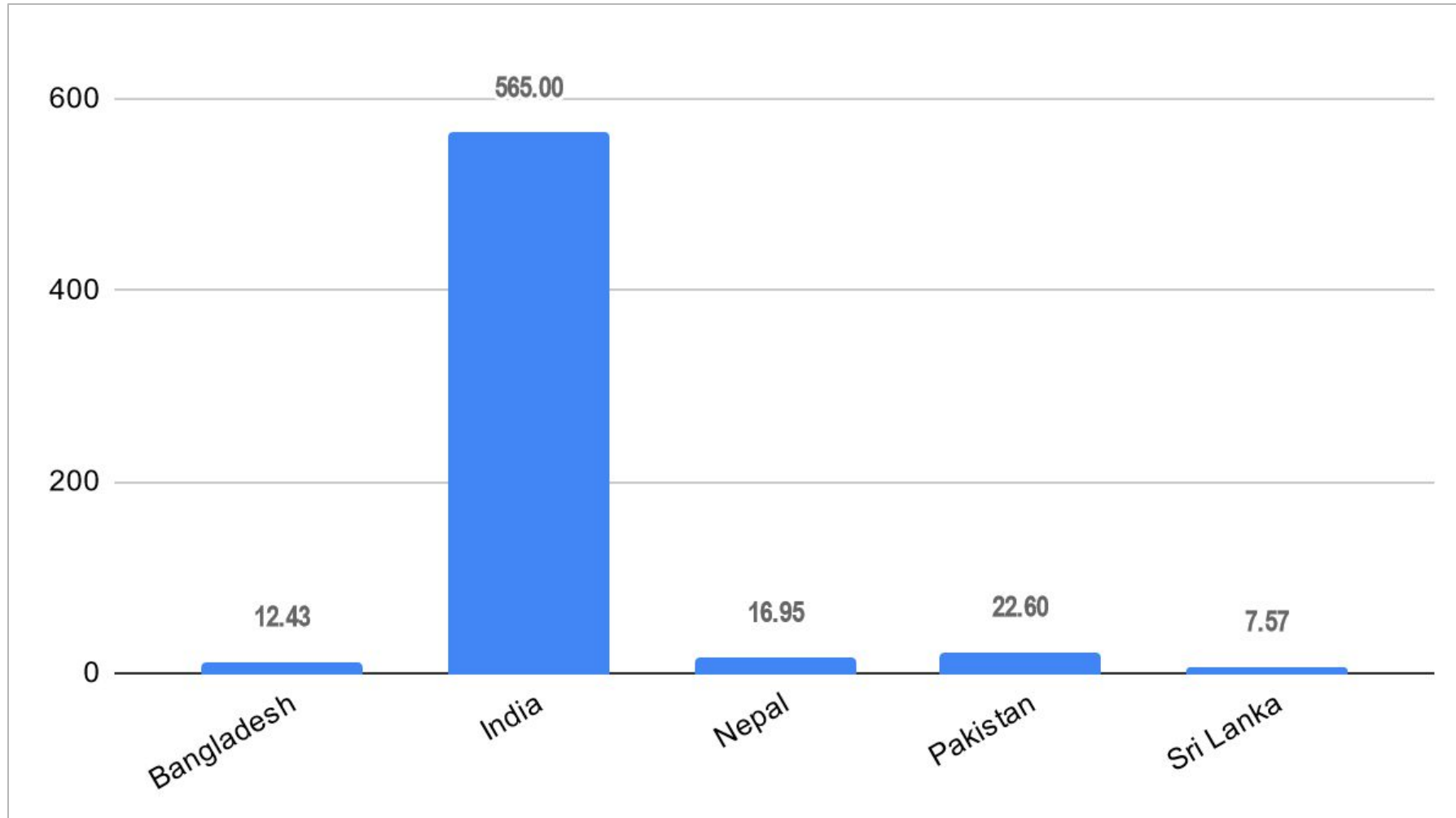
Technology



In most cases, the Governments are focusing on large-scale public or private power plants, not on the distributed community-based power systems, which empowers the communities and reduce burden from the national grid.

- Household-based Rooftop Solar System
- Industrial Rooftop Solar Systems
- Agrivoltaics
- Floatovoltaics
- Roadside Solar
- EPZ & SEZ Solar
- Rooftop Wind System
- Utility Scale Solar and Wind

Required Finance



In the next 6 years, these countries will require around USD 625 billion to reach the target. It could be reduced 50% by initiating distributed renewable energy.

Recommendations



- A clear roadmap of financing including grants and investments should be in place which can fulfill the financial demand to reach the target.
- Stop further fuelling the fossil fuels
- Transferring latest technologies so that the region can achieve rapid transition to renewable energy.
- Fossil Fuel Moratorium
- A clear pathways for installing Renewables
- Policy change to promote distributed Renewables



THANK YOU