

COP27: Issues for South Asia

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COP27: Issues, Agenda and Expectations

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Objectives of COP27

- ◆ COP27 – will build on the outcomes of COP26 to deliver action on an array of issues critical to tackling the climate emergency – from **urgently reducing greenhouse gas emissions**, **building resilience and adapting** to the inevitable impacts of climate change, to delivering on the **commitments to finance climate action** in developing countries

Climate Change and South Asia

- ◆ Among the most vulnerables but PC emissions among the lowest
- ◆ In terms of achievements on SDGs – among the laggards
- ◆ Climate change impacts on SDGs are well documented:
 - SDG1(poverty), SDG2 (Food Security), SDG3 (Health), SDG5 (Women are more vulnerable), SDG6 (Water security), SDG7 (Water energy nexus), SDG 8 (job loss in CC impacted sectors), SDG 10 (poor are more vulnerable - inequality), SDG 11 (Water/pollution), SDG 14 (Marine life threatened), SDG 16 (Environment induced conflicts)
- ◆ Mitigation efforts generally have positive impacts on SDGs (barring exceptions like job loss in polluting sectors), provided no diversion of resources from social development and adaptation.
- ◆ Climate change is happening (substantial increase in extreme weather events in SA region) and it will happen further

Internal Challenges in the Region

- ◆ The region suffers from substantial energy poverty – many people do not get minimum energy they require
- ◆ Low industrial development – India's effort to leap-frog from primary to service sector based economy failed
- ◆ Difficult to predict emission/energy consumption due fluctuating economic growth and structural changes
- ◆ India's per capita energy consumption is higher than Sri Lanka, but its per capita residential/personal/household energy consumption is lower – this is relatively much higher in developed countries.
- ◆ Africa's per capita consumption is low but much of minerals it produces (with high energy consumption) is meant for outside consumption!
- ◆ Ensuring economic development and providing adequate clean energy to all - major challenges!

External Challenges for the Region

- ◆ Most experts agree that, given the commitments made by countries, it will not be possible to limit temperature rise within 1.5 degree Celsius, it may even breach 2 degree Celsius level.
- ◆ NDCs/Net-zero targets: How ambitious? How credible? How much interim progress made?
- ◆ Crucial question before South Asia: Balancing mitigation and adaptation efforts!
- ◆ European roadmap for net-zero emission was crucially dependent on Russian gas – now things got unsettled
- ◆ US Roadmap – what if government changes again?

NDC Commitments/Progress in Major Countries

		2015 NDC (target for 2030)	2020 NDC (target for 2030)	Progress as of 2019	Net-Zero Year
US	GHG emission reduction (compared to 2005)	26-28% by 2025	50-52%	17%	2050
EU	GHG emission reduction (compared to 1990)	At least 40%	At least 55%	26%	2050
Brazil	GHG emission reduction (compared to 2005)	43%	43%	1%	2060
Russia	GHG emission reduction (compared to 1990)	25-30%	30%	30.3% (2018)	2060
South Africa	GHG emission target (incl. LULUCF)	398-614 Mt CO ₂ e (-28 to 17%)	398-440 MtCO ₂ e	478.61Mt CO ₂ e	2050

China's NDC Commitments & Progress

	2015 NDC (target for 2030)	2020 NDC (target for 2030)	Progress as of 2019
Carbon intensity reduction (compared to 2005)	60-65%	over 65%	48.1%
Non-fossil share in primary energy mix	about 20%	about 25%	15.3%
Forest volume increase (compared to 2005)	approx. 4.5 billion m ³	approx. 6 billion m ³	5.1 billion m ³
Wind and solar power generating capacity	No target	Over 1,200 GW	414 GW
Net-zero year: 2060			

NDC Commitments/Progress of India

	2015 NDC (target for 2030)	2020 NDC (target for 2030)	Progress as of 2019
Carbon intensity reduction (compared to 2005)	33-35%	45%	21%
Non-fossil share in power capacity	40%	50% (Energy?)	37.1%
Forest volume increase (compared to 2005)	2.5-3 billion tonnes of CO2 equivalent	--	1.88 (2005 base year)/0.40 (2015 base year)
Wind and solar power generating capacity	450GW (175GW by 2022)	500GW	96.96GW (2021)

*1 billion tonnes of emissions reduction from its projected emissions between now and 2030

*Net-zero year: 2070

State of play

- ◆ If other countries do not meet their targets, South Asian countries will have double jeopardy – mitigation can mean diversion of fund from adaptation and poverty reduction, health etc., but severe impacts from climate change!
- ◆ But we are not for a one-period game – It's a multi-period game
- ◆ If other countries do not follow their targets- SA countries/India will also deviate
- ◆ No country has given a clear roadmap and strategies for net-zero targets. EU has roadmap for 2030 but not for 2050.
- ◆ For most countries even no clear roadmap for 2030!
- ◆ In the long-run we are all dead – who will keep the promises?
- ◆ Need for clear roadmap and monitoring!

Developing Net-Zero Roadmap

- ◆ Difficult to predict 30-50 years – technology can be disruptive – How much to rely on technology – paradigm shift – mainstreaming ecology
- ◆ Easier for developed countries:
- ◆ For developed countries GDP growth rates have been around 2% and hence easy to make long term projections – for developing countries predicting GDP growth rates will be difficult
- ◆ Developed countries have a better idea about emerging technologies
- ◆ India has kept about 20 years of buffer for net-zero emission – If developed countries can manage only then the question will arise!
- ◆ Developed countries must establish clear roadmap
- ◆ Clear roadmap for developing countries will be difficult.

Adaptation and Finance

- ◆ South Asian countries need huge finance for building resilience
- ◆ This will require technology
- ◆ On mitigation, focus on technologies with co-benefits
- ◆ Need assessment and viability analysis
- ◆ Need elaborate planning – have to be done by local experts
- ◆ Capacity building of human resources