

## CLIMATE ENERGY FINANCE

## In a groundbreaking development, India's National Electricity Plan is reported to propose no new coal power

Tim Buckley, Director, Climate Energy Finance

9 May 2023

An <u>exciting report</u> has emerged that India's draft new National Electricity Policy (NEP) has proposed that India stop building of new coal-fired power plants beyond those already under construction. This proposal complements the <u>report</u> that India is looking to tender out 250GW of new renewable energy (RE) projects by FY2028 as part of its 450GW of renewables by 2030 policy focus. At 50GW annually, this is more than triple the run-rate of the last three years. With <u>4.5GW of new tenders</u> building on the 4.95GW of RE tenders auctioned and allotted in April 2023 alone, the Government of India is off to a good start.

It remains to be seen if this mooted amendment is approved by the national cabinet chaired by PM Narendra Modi. Without getting too excited preemptively, this strategic shift is potentially a critical, globally significant milestone in decarbonisation, highlighting the accelerating global investment and technology race to build out the zero emissions industries of the future, put into overdrive by President Biden's <u>US Inflation Reduction Act</u>.

The landmark Indian NEP reform would make China the only major economy <u>still approving new coal</u> <u>fired power plants</u>. Having said this, we also note China is concurrently leading the world by a very significant margin on decarbonisation, having added 149GW of renewable energy capacity in 2022, with another record 50GW added in 1QCY2023, as per our <u>recent analysis</u>. <u>BNEF</u> estimates China invested four times as much as the US in zero emissions technologies in total in 2022. And China has accelerated its push into electric vehicles (EV) with its new <u>record high 29% EV share</u> of passenger vehicle sales in 1QCY2023, with EV sales up 26% even as total sales fell 7% yoy.

The <u>global trend toward no new coal is accelerating</u> in line with the IEA's position that new fossil fuel developments are incompatible with a 1.5 degree pathway. As think tank <u>E3G reports</u>, the scale of proposed new coal power capacity outside of China is down by 84% since the Paris Agreement was signed in 2015, with reductions of 90% in OECD / EU and 83% in non-OECD countries. As of January 2023, only 20 countries have more than one coal project planned.

While the 28GW of new coal projects already in the pipeline in India are unaffected by the potential reform, it is an especially encouraging development given that in the last two or so years India's energy policy has regressed to encompass new coal power plants alongside weakened emphasis on new renewable energy infrastructure investment. A pivot back to climate ambition on this scale in India is momentous, and would help bring the energy transition pathway of the world's fastest growing large economy into a leadership position of developing countries, bringing scale and proof of the energy security and investment benefits of embracing the energy transition.

On a cautionary note, India has long flagged ambitious policy intent only to underperform on delivery. However, this change to the NEP would occur in the context of other recent key developments that signify increased emissions reduction and clean energy ambition on the part of the Government of India (GoI), coupled with strong net zero emissions ambition by Mukesh Ambani lead <u>Reliance Industries</u>, India's largest group, and the leadership of State Owned Enterprises like <u>NTPC</u> (currently building a 1.3GW project in the Khavda RE Park, Gujarat) as well as an influx of global capital into renewable energy projects in the country.

India's <u>Production Linked Incentive Scheme (PLI)</u> (tranche-II) saw significant progress, with the March 2023 award of 40GW pa of new domestic solar module manufacturing capacity, unlocking another Rs93,041 crore (US\$11bn) of new investment.

April 2023 saw the Gol announce exciting plans to treble renewable energy tenders to 50GW pa to <u>add 250GW of RE by 2027/28</u>, aligned with the trajectory required for the goal of 450GW by 2030. After strong tendering momentum in April 2023, May has kicked off well with a very cost competitive <u>1GW solar tender awarded at Rs2.62/kWh</u>.

April 2023 has also seen a landmark endorsement of Indian renewables with one of the world's largest RE asset managers, Brookfield of Canada, announcing it will commit US\$1bn to <u>Avaada</u> <u>Energy</u>, in line with Brookfield India's aggressive solar expansion plans of <u>12-16GW RE</u> by 2027. Brookfield also invested \$360m to acquire a <u>55% stake in CleanMax</u>, an India-based C&I renewable platform with an operating and development pipeline of 4.5 GW. And KKR US announced it would invest another US\$250m in <u>Serentica Renewables</u>, building on its US\$400m investment in 2022. These three significant announcements jointly serve to help rebuild strong momentum after 3 years of stalling delivery on the country's energy transformation, illustrating the growing mobilisation of foreign investment into clean energy in India, which we <u>tracked recently</u>.

Electricity demand in India grew at a very robust <u>+9% year on year</u> (yoy) in 2022/23, building on +8% yoy in 2021/22, highlighting the sustained economic growth of India.

Combined with ongoing investments in building out and modernising India's grid to progressively reduce aggregate technical and commercial (AT&C) losses and the drive to make ongoing energy efficiency savings, the NEP reform and upsurge in non fossil fuel generation (including <u>nuclear</u> and <u>hydro</u>) should prove sufficient to deliver almost all the additional electricity demand growth required to match the electricity demand growth required to support the likely 5-7% pa real GDP growth over the period to 2030 from zero emissions sources, building India's energy security and reducing reliance on imported fossil fuels.

Implementation of a policy change to no new coal has material implications not only nationally but globally for the existential challenge of the mounting climate crisis. It would accelerate India well beyond its admittedly conservative COP26 pledge of net zero emissions by 2070, and bring forward the full decarbonisation of its economy to, potentially, a decade earlier. Given India is the <u>world's third largest emitter</u>, responsible for 7% of global emissions, and has a rapidly burgeoning economy and population, it can arguably make or break 1.5 degrees C in its own right.

On a domestic level, accelerating the transition of the economy to clean energy is just as critical. If India is to achieve its headline goal of 450GW by 2030 and reduce itself from dependence on highly polluting, volatile and expensive coal and LNG imports, we need to see policy resolve with the level of ambition embodied in the proposed amendment to the NEP. The transition to clean energy and away from fossil fuels is a key foundation underpinning India's continued strong economic growth. The transformative benefits of cheap, abundant, zero emissions, domestic renewables for the Indian people and economy demand that the government delivers.

Contributing editor: <u>Annemarie Jonson</u>, CEF