FUND LAUNCHED	FUNDS UNDER MANAGEMENT	NET ASSET VALUE PER SHARE
2005	£524.9 MILLION	471.1% SINCE INCEPTION*

UTILICO Emerging Markets Trust plc

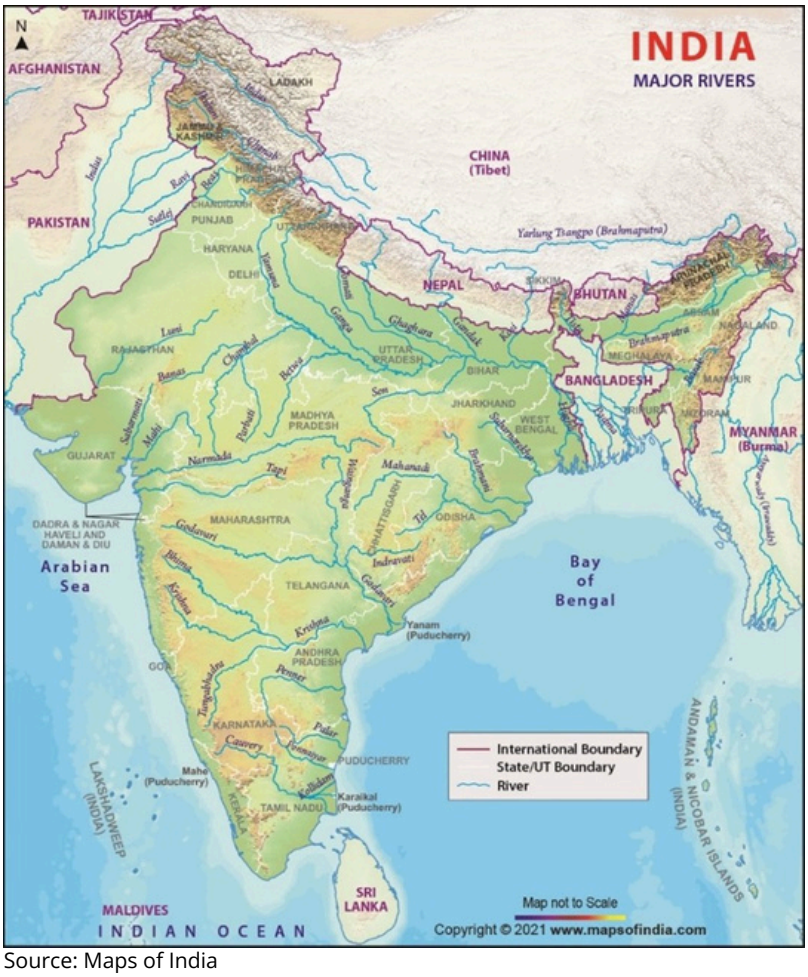
NHPC Limited: Benefitting from India's Hydropower Focus

July 2025

A key challenge globally in the transition to net zero has been the intermittency of renewables, necessitating carbon-neutral sources that can compensate for the loss in baseload characteristics from fossil-based power. This issue has already exposed vulnerabilities in the power systems of many countries that are ahead in the green transition curve. Whilst in the near to medium term gas-fired power is being utilised as a transition fuel, its longer-term replacement will still be required to achieve net zero goals. Unfortunately, the typical go-to green solutions come with many associated challenges, commonly related to cost and lead times, as well as individual drawbacks, whether it is the technical complexity of nuclear, the geographic prerequisite of hydropower, or the not yet feasibility of large-scale battery energy storage needed to support wind and solar.

The situation is no different in India, which must reduce its heavy reliance on fossil-based power, which still accounts for a staggering 75% of its total generation as of FY25[1], if it is to meet its ambitious climate target of net zero by 2070[2]. Fortunately enough, India is endowed with some of the largest mountain ranges in the world, with the Himalayas lining its northern border and the Karakoram mountains to the northwest, representing the hydrological sources to some of the world's largest rivers. Such topography enables significant hydropower opportunity, with a 2023 study by the Central Electricity Authority (CEA) estimating total exploitable hydropower potential at 133.4GW, of which 90GW is yet to be harnessed[3].

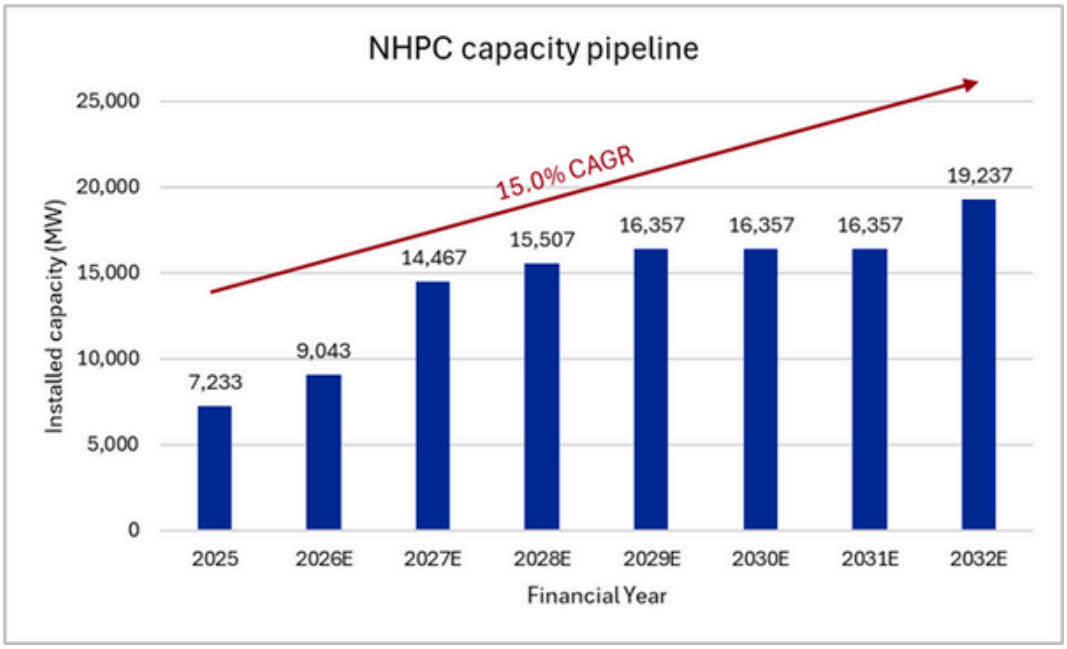
Recognising the long-term benefits of hydropower, the Indian Government is actively pursuing its expansion, fostering an attractive investment environment that compensates appropriately for the challenges inherent to hydropower development. Specifically, hydropower in India operates under a regulated framework based on a return on equity set by the regulator – 15.5% ROE for run-of-river projects, the same level as coal, and 17% for storage based projects[4], reflecting a premium for its energy storage ability – combined with an embedded incentive structure that allows hydro operators to earn in excess of the regulated return in order to encourage good performance. Importantly, the regulatory model also provides assurances and guarantees of the principal exogenous risks to hydro projects, such as project delays and hydrology.



Source: Maps of India

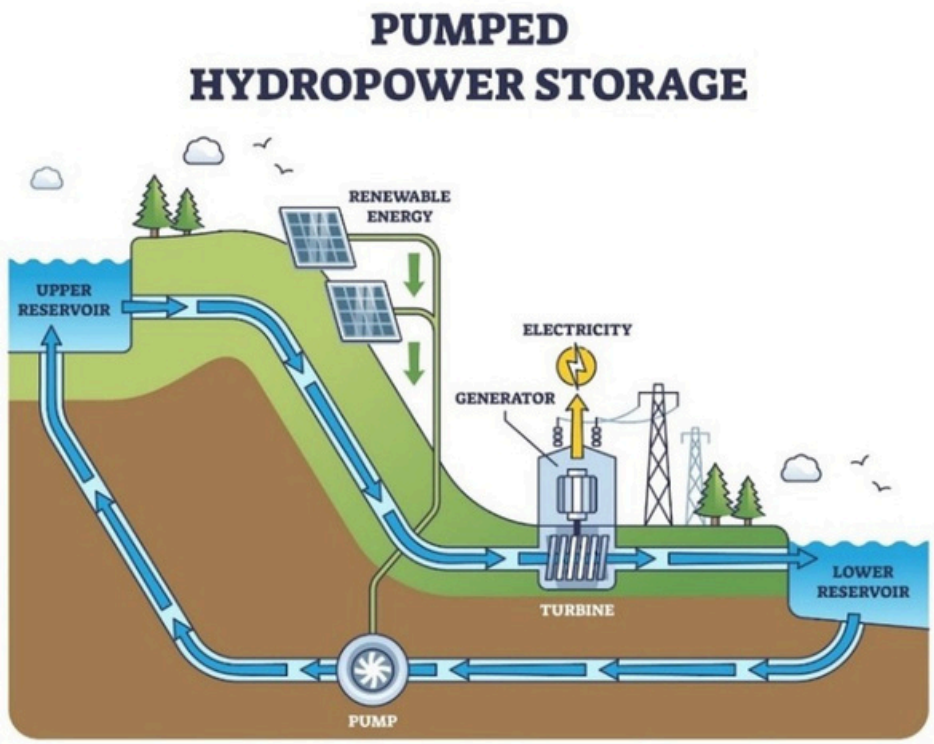
The central player of hydropower development in India is state-owned NHPC Limited (NHPC), formally National Hydroelectric Power Corporation, making it the primary avenue to pursue the government's hydropower ambitions. NHPC currently has an operational capacity of 8,140MW, of which 7,771MW is hydro and 369MW is renewables[5]. Whilst hydropower in India is not exclusive to NHPC, competition is sparse as long lead times, large capex commitments and project complexity act as a natural barrier, favouring NHPC with its sizable balance sheet, specialist expertise and status as a government entity.

Having seen limited growth over the past 10 years, NHPC is now benefitting from India's hydro push and entering a transformational growth phase. Its current pipeline is set to increase capacity 2.4-fold to 19.2GW by FY32[5], including the mammoth 2.0GW Subansiri Lower and 2.9GW Dibang projects, which will each become India's largest hydropower plant once constructed. Correspondingly, NHPC's regulated equity will more than double, fuelling a 23.0% EPS CAGR over the next 7 years based on internal forecasts. Beyond its pipeline of under-construction projects, NHPC has established capacity targets of 23GW by FY32 and longer-term ambitions of 50GW by FY47[6].



Source: NHPC, ICM

Apart from conventional generation, hydropower has also been recognised for its energy storage ability, enabling it to effectively act as a battery for the grid. This has led to the concept of pumped hydropower storage – a closed loop system that uses cheap electricity during sunlight hours to pump water to a higher elevation, whose potential energy can then be used to produce power at a later time when electricity is in higher demand. Pumped hydro is set to play a key role in India's future power system, with 26.7GW already incorporated into India's National Electricity Plan 2032[7], again incentivised by earning the higher 17% ROE similar to conventional storage-based projects[4]. As the primary hydro developer in India, pumped hydro is a natural offshoot for NHPC, representing a significant opportunity, having already identified 19GW of potential projects[5].



Source: Yes Energy

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NHPC presents a compelling investment case, structurally core to India's long-term energy transition and energy security as a key source of baseload renewable energy, providing a decadal growth opportunity that is already commencing at pace. Given its market position, we expect that NHPC will capitalise on such an opportunity, as to date they have displayed a proven track record of strong execution and operational excellence. NHPC is currently a top 30 holding of UEM.

Henry Beck

2 July, 2025

Source Data: ICM Limited.

[1] Central Electricity Authority (2025). Renewable Generation Report - Central Electricity Authority. [online] Central Electricity Authority. Available at: https://cea.nic.in/renewable-generation-report/?lang=en.
[2] Press Information Bureau (2022). India's Stand at COP-26. [online] Pib.gov.in. Available at: https://pib.gov.in/PressReleasePage.aspx?PRID=1795071.
[3] Press Information Bureau (2024). HYDRO POTENTIAL IN THE COUNTRY. [online] Pib.gov.in. Available at: https://www.pib.gov.in/PressReleasePage.aspx?PRID=2040094.
[4] Central Electricity Regulatory Commission (2024). CENTRAL ELECTRICITY REGULATORY COMMISSION NEW DELHI. [online] Available at: https://cercind.gov.in/regulations/notification-2024.pdf.
[5] NHPC Limited (2025). Investor Presentation March 2025. [online] Available at: https://www.nhpcindia.com/welcome/page/125.
[6] Press Information Bureau (2024c). NHPC Limited accorded with 'Navratna' company status. [online] Pib.gov.in. Available at: https://www.pib.gov.in/PressReleasePage.aspx?PRID=2050374.
[7] Central Electricity Authority (2024). National Electricity Plan | Government of India | Ministry of Power. [online] Powermin.gov.in. Available at: https://powermin.gov.in/en/content/national-electricity-plan-0.

Utilico Emerging Markets Trust plc | Registered Office

The Cottage, Ridge Court, The Ridge, Epsom Surrey, KT18 7EP, United Kingdom
Company registration number: 11102129
www.uemtrust.co.uk

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