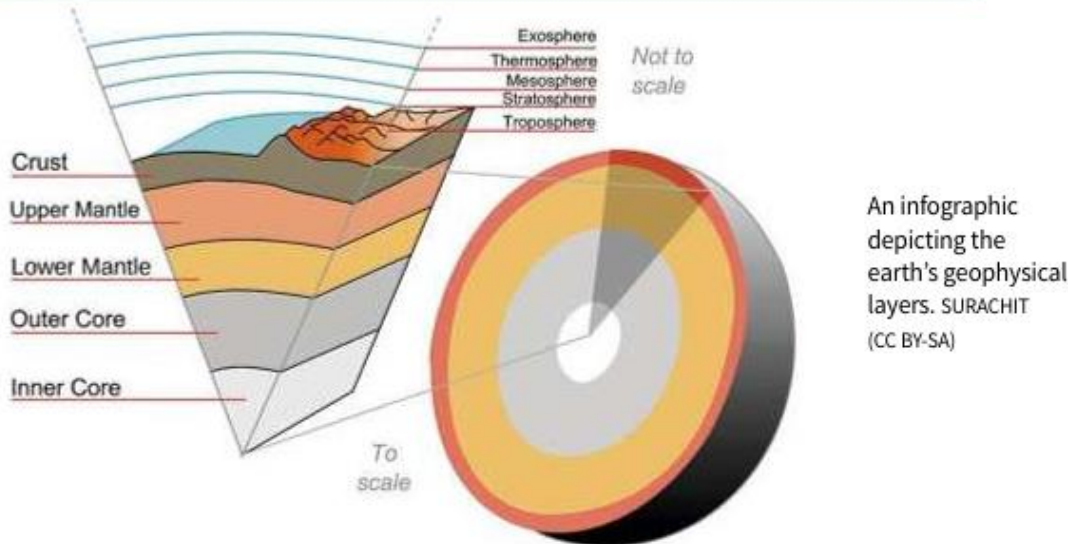


WHAT IS IT?

Outer core: unafraid of drama



An infographic depicting the earth's geophysical layers. SURACHIT (CC BY-SA)

Vasudevan Mukunth

The earth's outer core is a voluminous liquid layer that lies around 2,800 km beneath the surface. This hot, churning sea is filled with molten iron and nickel.

As the outer core moves constantly, it acts like a large generator, creating the planet's magnetic field, which shields the earth from harmful solar radiation.

Researchers from the University of Edinburgh and the British Geological Survey have reported that around 2010, the liquid iron in the outer core below the equatorial Pacific Ocean changed direction from a slow westward crawl to a more rapid eastward surge.

They found this after mapping 27 years of iron movement in the outer core using data from ground stations and four European satellites. They identified two important patterns in the flow.

The main pattern accounted for 95% of the movement: it consisted of a

steady flow westwards — which also explains why the earth's magnetic field has historically drifted west. The second pattern revealed the dramatic shift in 2010. The researchers also found that this shift began to weaken around 2020.

The researchers were able to link the 2010 reversal to seismic and geodetic shifts in the earth's solid inner core. According to their model, the flow is also roughly 10% lopsided between the northern and the southern hemispheres.

These details could explain sudden 'jerks' in magnetic field readings and suggest that deep-earth liquids can change direction much faster than the traditional theory predicts.



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GS Paper II – Polity

THE HINDU

Coerced consent

Supreme Court should set aside sedition as constitutionally unsustainable

The Indian state has not infrequently used the colonial offence of sedition, codified under Section 124A of the Indian Penal Code (IPC), as a tool to quell dissent. In May 2022, the Supreme Court of India asked State and central governments to refrain from registering new first information reports and from taking coercive measures under Section 124A in *S.G. Vombatkere vs Union of India* while the Centre said it would “reconsider” the provision. When the Bharatiya Nyaya Sanhita (BNS) took effect in 2024, Parliament effectively replaced Section 124A with Section 152 and increased the minimum sentence to seven years. It was sedition by a new name. In February 2026, Chief Justice of India Surya Kant orally observed that the Centre’s promise in 2022 to review the provision could not bind Parliament. As if to release the pressure on courts, but also effectively easing the country’s passage into the BNS era, on May 21, 2026, the Court said that if an accused person has no objection, courts may proceed on cases involving Section 124A. However, such consent from the accused may be coerced, especially if they lack robust legal representation, because the alternative for the incarcerated persons is indefinite delay. It is effectively a Hobson’s choice between bad and worse outcomes.

Indeed, as the 2022 stay paused the use of Section 124A pending constitutional challenge, how meaningful an accused person’s consent to trial can be where refusal may entail prolonged delay is unclear. *S.G. Vombatkere* also provided those charged with sedition to move for bail, meaning liberty rather than restoring proceedings was the intended remedy for frozen trials. The May clarification swings in the other direction, and also stands in contrast to the ‘bail is the rule’ principle that the Court recently reinforced in *Syed Ifthikhar Andrabi*. If the Court wished to preserve agency, it should have paired continuation with a presumption of bail. The 2022 stay was also intended to annul the chilling effect of the charge of sedition on free speech. Now, wealthier or politically connected accused persons may secure bail through sustained litigation and wait out proceedings outside the prison, whereas poorer prisoners who are unable to secure bail will be compelled to consent to a trial, if only to obtain a verdict. As a result, liberty could depend on the capacity to litigate rather than on legal principles. Finally, if the state knows that cases involving constitutionally contested offences can remain in limbo while the accused persons are incarcerated, there is a perverse incentive for bad-faith state actors to not resolve the underlying uncertainty quickly. Instead of determining once and for all whether sedition as a criminal offence is constitutionally sustainable, the Court has passed the burden to the accused and declined to do its own duty.



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GS Paper II – Polity

SC's revival of Section 124A triggers concerns over a colonial law the country did not want

NEWS ANALYSIS

Krishnadas Rajagopal

NEW DELHI

The Supreme Court's May 21 revival of Section 124A (sedition) proceedings against consenting accused persons exposes them to an admittedly oppressive provision both the court and the Union government agreed was "not in tune with the current social milieu, and was intended for a time when this country was under the colonial regime".

A three-judge Bench of the Supreme Court had frozen all proceedings under Section 124A of the now-repealed Indian Penal

Code on May 11, 2022, virtually casting a shadow of doubt over every sedition case at the time.

The Bench, of which Surya Kant, then a judge of the Supreme Court, was a member, had recorded the rampant misuse of the provision, which dates back to 1898 and predates the Constitution.

The interim order of May 11 had taken excerpts from a Union government affidavit, filed just two days earlier, quoting Prime Minister Narendra Modi's firm belief during 'Azadi Ka Amrit Mahotsav' that "we need to, as a nation, work even harder to shed colonial baggage that has passed its utility, which includes outdated colonial



laws and practices".

'Chilling effect'

The court had concurred with the Union government that colonial laws such as Section 124A, punishable with life imprisonment and having a "chilling effect" on free speech,

caused "mindless hindrances to people" and "reeked of a colonial mindset that has no place in today's India".

The Supreme Court's position on Section 124A in May 2022 was in consonance with its judgment in *I.R. Coelho versus State of Tamil Nadu* that law must be in step with the "march of time".

However, the court's May 21, 2026 clarification has unlatched Section 124A, ostensibly to protect the right to a speedy trial for accused persons seeking closure. The order, passed last week, recorded that there would be no "impediment for the courts to decide such matters [under Section 124A]

on merits and in accordance with law".

However, the challenge to the very constitutionality of Section 124A remains alive and pending in the top court.

Multiple writ petitions, titled *S.G. Vombatkere versus Union of India*, have challenged Section 124A for violating the Fundamental Rights to free speech and expression, personal liberty, life, and equality before the law.

The pendency of the Vombatkere petitions raises the question of whether lower courts should pronounce judgments on guilt when the constitutionality of the provision itself is under challenge in the Supreme Court.



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GS Paper II – Polity

+ Muslim organisations seek consultations with Assam government on UCC Bill

The Hindu Bureau

GUWAHATI

Muslim religious and social organisations have urged the BJP-led Assam government to heed their views before implementing the Uniform Civil Code (UCC).

Chief Minister Himanta Biswa Sarma said the draft UCC Bill would be tabled in the House on May 26, the concluding day of a special Assembly session that commenced on May 21.

Leaders of at least 10 organisations met in Guwahati on Saturday and resolved to submit a memorandum to the government seeking consultations before the proposed legislation is introduced. The organisations included two factions



CM Himanta Biswa Sarma said the draft UCC Bill would be tabled in the House on May 26.

of Jamiat Ulema-e-Hind, Jamaat-e-Islami, Ahle Sunnat, Muslim Personal Law Board, Nadwatul Tamir, Milli Council, and the All Assam Minority Students' Union.

Nadwatul Tamir organisational secretary Maulana Farid Uddin Choudhury, who chaired the meeting,

said the State government should not ignore stakeholders from the minority community before going ahead with such a major decision.

“The matter is directly linked to Islamic religious practices and personal laws, necessitating wider consultations with minority organisations before any legislative move,” Hafiz Rashid Ahmed Choudhury, senior advocate and president of Assam Civil Society, said.

Implementing the UCC was one of BJP's promises for the Assembly election. Soon after taking oath as the Chief Minister for a second consecutive term, Mr. Sarma said his government would introduce a law in this regard.



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GS Paper III – Environment

India's green transition still runs on coal

The recent rise in global energy prices following the escalation of the conflict in West Asia has once again exposed India's continuing vulnerability to external energy shocks. Despite years of policy emphasis on renewable energy, nearly half of India's fossil fuel imports still transit through the Strait of Hormuz, including crude shipments from Saudi Arabia and Liquefied Natural Gas (LNG) imports from Qatar.

This vulnerability sits uneasily alongside the dominant narrative around India's clean energy transition. Over the past decade, India has emerged as one of the world's fastest-growing renewable energy markets. Since 2017, renewables have consistently accounted for the largest share of new power capacity additions in the country. In numbers, renewable energy sources accounted for 42.4% of India's installed power capacity by March 2026, up dramatically from just 0.72% in March 2005. Over the same period, coal's share in installed capacity fell from 58.7% to 42.2%.

By conventional metrics, India appears well into an energy transition. Yet, the persistence of energy price shocks reveals a more complicated reality. Installed capacity is not the same as actual electricity generation. While renewables now account for over two-fifths of installed capacity, they generated only 15.8% of electricity in April 2026. Coal, by contrast, still accounted for 71.8% of electricity generation, only marginally lower than its 76.2% share in March 2019.

Capacity and generation gap

This gap between capacity and generation is central to understanding India's energy system. The country has succeeded in building renewable infrastructure, but not yet in replacing coal in the actual electricity mix. In effect, renewable energy is being added on top of coal rather than



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Rising renewable capacity has yet to substantially displace coal generation

displacing it. The data clearly show India's continued dependence on coal. Despite strong renewable growth since 2017, India has added almost no new fossil fuel capacity since 2018, retired very few old coal plants, and seen gas-based capacity decline. As a result, coal remains the main backup and balancing source in the power system.

The reasons are structural. Solar and wind power remain intermittent sources of electricity. Their output fluctuates with weather conditions and the time of day, while electricity demand remains continuous. In the absence of large-scale battery storage, flexible grids and adequate balancing capacity, coal continues to provide the baseload reliability required to keep the system functioning.

This also explains why domestic electricity prices remain closely tied to global fossil fuel markets. Historical trends show Indian electricity prices moving alongside Brent crude in the last few years. Even sectors that appear domestically anchored remain indirectly exposed to external commodity cycles because fossil fuels continue to determine marginal cost of power.

Ground reality

As a result, current geopolitical tensions in West Asia affect India more severely. A spike in crude prices not only raises transportation and industrial costs directly, but also pushes up coal prices, electricity tariffs, inflation, and fiscal pressures.

India's energy transition discourse is increasingly centred around the wrong benchmark. The focus remains on installed renewable capacity because it offers an attractive measure of progress. Yet, power systems are not sustained by headline capacity additions. They depend on actual electricity generation and the

ability to supply power consistently when it is needed most.

The distinction matters because it shapes perceptions of vulnerability. China remains less exposed, with oil and gas accounting for only 4% of its power mix and electric vehicles and hybrids, now over half of new car sales, reducing oil demand by over a million barrels a day. Spain shows the alternative, having broken the gas-electricity link through renewables. India's transition is real, but incomplete.

Work towards system transformation

This does not diminish the importance of the renewable push. On the contrary, India's decision to aggressively scale solar and wind capacity since the late 2010s now appears prescient given growing geopolitical instability and fossil fuel volatility. But the next phase of transition will require moving beyond capacity creation towards system transformation itself.

That means investing in storage infrastructure, grid modernisation, transmission connectivity and market mechanisms capable of integrating intermittent renewables at scale. It also requires recognising that coal's persistence is not simply a policy failure or institutional inertia. Coal currently performs a stabilising function within the grid that renewable energy, in its present form, cannot yet fully replicate.

India's energy challenge today is therefore not merely about producing more green power. It is about building an electricity system in which renewables can reliably substitute for fossil fuels in actual generation. Until that happens, every geopolitical crisis and every spike in global energy prices will continue to remind India that its green transition still runs on coal.

The views expressed are personal