

A Vision for Sovereign Digital Infrastructure

India, with its thriving digital public infrastructure and youthful population, is poised to lead the next monetary revolution. As the global financial system faces mounting debt, surveillance, and exclusionary capital controls, **Bitcoin offers India a neutral, open-source alternative** — one that protects individual liberty, promotes energy innovation, and enables borderless growth.

This policy lays out six key pillars to responsibly and strategically integrate Bitcoin into India's economy — for the people, by the people.

1. Legal Recognition & Clarity

Objective: Provide unambiguous legal classification for Bitcoin, empowering individuals and institutions to own and use Bitcoin securely under Indian law.

Key Proposals:

- Classify Bitcoin as "private digital property", not as currency or security. This separates Bitcoin from volatile, centralized tokens and protects it from miscategorization under the VDA (Virtual Digital Asset) regime.
- Exempt long-term holders (2+ years) from capital gains tax to incentivize savings and financial discipline.
- Guarantee the right to self-custody the ability to hold and transact Bitcoin directly without custodians — under Article 300A of the Constitution (Right to Property).
- **Protect peer-to-peer transactions** as a basic constitutional freedom analogous to the right to own gold, cash, or other movable property.

Why This Matters:

India's current legal ambiguity risks driving innovation offshore and criminalizing everyday users. Clear, asset-based recognition of Bitcoin will:

- Reduce legal risk for builders and investors
- Enable long-term savings
- Ensure compliance pathways for businesses

Bitcoin is not a security. It's not a company. It's digital property owned and secured by millions worldwide — including Indians.

2. / Mining & Energy Monetization

Objective: Use Bitcoin mining to monetize wasted, stranded, or curtailed energy, transforming electricity into sovereign digital reserves.

Key Proposals:

- Recognize Bitcoin mining as a digital export, especially when powered by renewables and surplus generation.
- Legalize and incentivize zero-emission mining using hydro, solar, wind, and flare gas mitigation technologies.
- **Create Digital Energy Zones** near remote energy sites to deploy containerized Bitcoin miners and monetize excess production.

Global Examples:

- **Bhutan** mines Bitcoin using hydropower to boost state revenues while preserving energy sovereignty.
- **El Salvador** mines Bitcoin with geothermal volcano power, building a digital treasury from stranded energy.

India-Specific Potential:

- India wastes 25–30 TWh of electricity annually due to transmission losses and grid curtailments.
- This could mine **up to 150,000 BTC/year**, turning otherwise wasted energy into hard digital reserves.
- Mining at dams, solar farms, or gas flares could make energy projects profitable faster and help balance the grid.

Outcome:

- Improves grid efficiency
- Attracts foreign capital for energy innovation
- Builds Bitcoin reserves from Indian energy not foreign currency

With Bitcoin, India can export energy without building a single pipeline.

3. Z Capital Flow Liberalization

Objective: Enable legal, seamless, and regulated INR–BTC transactions for individuals, startups, and financial institutions.

Key Proposals:

- Enable INR-BTC on/off ramps under clear RBI licensing, avoiding legal uncertainty.
- Replace the 1% TDS on crypto transfers with a rational, holding-based capital gains framework — similar to equity LTCG tax.
- Allow peer-to-peer transfers and self-custody without penal restrictions or overreach.

Context:

The current policy penalizes Indian exchanges and pushes users to offshore or gray markets. Users face:

- 30% flat capital gains tax
- 1% TDS on every trade
- No deduction of losses

Solution:

Treating Bitcoin like digital property (not a risky VDA or speculative token) will:

- Bring capital back onshore
- Boost Indian exchange growth
- Give citizens a savings option beyond gold, real estate, and depreciating fiat

Capital should flow with freedom — not be caged in fear.

4. 📚 Education, R&D, and Innovation

Objective: Position India as a global leader in Bitcoin research, development, and open-source innovation.

Key Proposals:

- Introduce Bitcoin and decentralized systems curriculum in IITs, IIMs, NITs, IIITs, and central universities.
- Fund research labs and centers of excellence for cryptography, distributed computing, and monetary systems.

• Support developer training and full node operations, ensuring India contributes to protocol development.

Grassroots Impact:

- **Bitshala** is India's first grassroots Bitcoin education initiative bringing technical workshops, reading groups, and privacy tools to leading campuses.
- Students from IIT Madras, IIT Bombay, and IISc are actively participating in Bitcoin open-source research.

Outcome:

- Reduces dependence on foreign protocols and financial rails
- Empowers Indian engineers to build the next generation of decentralized infrastructure
- Creates domestic employment in cryptographic tech and hard-money finance

Bitcoin is not just code — it's India's entry into the digital monetary era.

5. 🔒 Privacy & Civil Liberties

Objective: Ensure that financial privacy, self-custody, and freedom to transact remain protected in India's digital future.

Key Proposals:

- **Uphold financial privacy** as a constitutional right under the Supreme Court's 2017 *Puttaswamy* judgment.
- Restrict mass surveillance tools, including blockchain analytics used without court-sanctioned oversight.
- **Exempt low-value, peer-to-peer transactions** from heavy KYC/AML requirements similar to cash and gold use.

Context:

As CBDCs and global surveillance tools rise, Bitcoin stands as a digital shield for civil liberties.

India must:

- Avoid "surveillance finance" policies that treat all users as suspects
- Champion individual privacy as essential to a healthy democracy

Privacy is not a privilege. It is a human right.

6. S Global Integration

Objective: Use Bitcoin to strengthen India's role in cross-border finance, trade, and global monetary alignment.

Key Proposals:

- Integrate Bitcoin with UPI using Lightning Network bridges to enable instant, low-fee international transfers.
- **Build bilateral Bitcoin corridors** with Gulf countries, Southeast Asia, Africa, and BRICS partners.
- Allow Bitcoin reserves for trade in non-USD settlements, strengthening BRICS monetary autonomy.

Remittance Revolution:

- India is the world's largest remittance recipient (~\$125B/year).
- Average remittance fee: 6–7%
- Bitcoin Lightning fee: ~0.002%
- Delivery time: ~3 seconds

Outcome:

- Reduce diaspora remittance fees
- Build a digital trade surplus
- Strengthen India's monetary independence

Bitcoin is not a threat to India. It is India's global opportunity.

Conclusion: India's Bitcoin Moment

This is not just about technology. It's about sovereignty.

Bitcoin gives India:

- A neutral, apolitical asset base
- A chance to monetize local energy
- The tools to defend privacy and empower youth

With foresight and courage, India can lead the world into a digital monetary future — one where power flows not from empires, but from protocols.

Bitcoin Policy Institute of India 2025

Crafted by citizens, builders, and educators who believe in a sovereign India.

"Opt out of decay. Opt into strength. Choose Bitcoin."

Unlocking the Economic Power of Himalayan Hydropower through Bitcoin Mining

Executive Summary

India's Himalayan states — Himachal Pradesh, Uttarakhand, and Arunachal Pradesh — collectively hold over 100 gigawatts of hydroelectric potential, most of which remains untapped due to transmission limitations, logistical challenges, and lack of proximate industrial demand. Bitcoin mining offers a breakthrough solution by converting stranded hydro energy into digital assets that can be stored, exported, or held as sovereign reserves.

The Opportunity

State	Estimated Hydro Potential	Utilized
Himachal Pradesh	27,000 MW	~11,000 MW (40%)
Uttarakhand	25,000 MW	~4,000 MW (16%)
Arunachal Pradesh	50,000 MW	~1,200 MW (2%)

Much of this capacity is either unutilized or curtailed due to lack of connectivity to the national grid or local demand.

Why Bitcoin Mining?

Bitcoin mining allows India to convert energy directly into digital value. Unlike traditional industrial uses, mining is modular, mobile, and scalable. It does not require urban infrastructure or long-distance transmission. Mining operations can be deployed directly at source — even in remote mountain valleys.

Strategic Fit for Himalayan States

Bitcoin mining:

- Enables monetization of electricity that would otherwise be wasted.
- Provides revenue streams to local governments and communities.
- Can be deployed quickly via containerized mobile units.
- Requires minimal water and does not pollute or disrupt the environment.
- Strengthens digital sovereignty through onshore BTC production.

International Precedents

- **Bhutan** is mining Bitcoin using its hydro surplus to generate national revenue.
- Norway mines BTC using stranded hydropower from fjords and remote valleys.
- El Salvador uses geothermal energy from volcanoes to mine BTC and build reserves.

Proposed Pilot Zones

Three Himalayan districts are ideal to initiate public-private pilot mining operations:

- 1. Kinnaur, Himachal Pradesh
- 2. Chamoli, Uttarakhand
- 3. Tawang, Arunachal Pradesh

These areas meet key criteria:

- Existing small-scale hydroelectric facilities
- Low grid off-take or curtailed output
- Strong community need for employment and infrastructure
- Proximity to geopolitical frontiers, boosting strategic relevance

Economics of Deployment

- 1 MW of continuous hydro energy can mine approx. 3.5 BTC/month
- **100 MW** = ~4,200 BTC/year = ~₹4,500 crore/year (@₹1 crore/BTC)

This turns previously stranded energy into high-value exportable digital capital.

Policy Recommendations

- Classify Bitcoin mining as a strategic export industry under renewable energy development.
- 2. Create a "Green Digital Mining Zone" framework for hydro-based regions.
- 3. **Offer zero GST and electricity duty exemption** on mining operations powered by renewables.
- 4. Allow state electricity boards to partner with private miners under transparent revenue-sharing models.
- Allocate R&D grants for rural container mining technologies via institutions like Bitshala and IITs.

Implementation Steps

- Identify top 10 unused or curtailed hydro stations in the Himalayan belt
- Conduct grid-free feasibility assessments for modular mining
- Invite public-private partnership (PPP) bids for containerized pilot setups
- Launch a 12-month Himalayan Hydro Mining Pilot Scheme

Long-Term Vision

By unlocking even 5% of the region's hydro potential for mining, India could secure:

- Over **20,000 BTC annually** in digital revenue
- Strategic reserves for international settlements
- Sustainable economic development in remote districts

"Bitcoin gives us a way to turn our geography into strength — to monetize altitude, rivers, and remoteness — without needing anyone's permission."



Monetizing India's Midday Solar Surplus with Bitcoin Mining

Executive Summary

India's solar capacity is among the fastest-growing in the world, but much of this energy is wasted. In states like **Rajasthan, Gujarat, Telangana**, and **Madhya Pradesh**, **midday solar oversupply** leads to grid curtailment and underutilized infrastructure.

Bitcoin mining offers a breakthrough use case — converting excess, otherwise-wasted solar energy into monetary value via the Bitcoin network. This digital export requires no physical shipment, only internet access and electricity.

The Problem: Oversupply and Curtailment

- India's total solar capacity (2025): ~80 GW
- Curtailment during peak midday hours due to:
 - Limited local demand
 - Transmission congestion
 - Inflexible grid operations
- Farmers under PM-KUSUM often **underuse their solar pumps** due to lack of financial incentive

Wasted energy = lost economic opportunity.

The Opportunity: Bitcoin as a Solar Battery

Bitcoin mining functions like a **programmable demand sink**, perfectly matched for intermittent, abundant solar:

- **Real-time buyers** of electricity no one else uses
- Operate close to the source, reducing grid load
- Can be paused and resumed instantly based on energy availability
- Provide revenue and uptime incentives for farmers, DISCOMs, and cooperatives

Strategic Zones for Solar Mining

State	Solar Generation Clusters	Mining Suitability
Rajasthan	Jodhpur, Barmer, Bikaner	High
Gujarat	Kutch, Banaskantha, Patan	High
Telangana	Nalgonda, Mahbubnagar, Medak	Medium-High
Madhya Pradesh	Rewa, Neemuch, Mandsaur	Medium

Real-World Precedents

- Exas, USA: Bitcoin miners stabilize the grid by absorbing solar/wind during surpluses.
- Kazakhstan/Uzbekistan: Pilot mining projects utilize desert solar, generating foreign income
- **El Salvador**: Exploring mining with volcano, hydro, and solar-based models for rural development.

Economic Impact (Updated for ₹1 crore/BTC)

A 1 MW solar array, operating 6 hours/day, can mine ~1 BTC/month:

- 100 MW → ~1,200 BTC/year = ₹1,200 crore/year (at ₹1 crore/BTC)
- 1 MW → ₹12 crore/year in digital export

This income:

- Strengthens India's forex reserves (no import/export costs)
- Incentivizes rural energy deployment
- Monetizes idle energy assets

Environmental Benefits

- Zero-emissions monetary network
- Increases India's solar utilization factor
- Reduces waste and supports India's 2030 Net Zero pathway
- Requires no new fossil fuel infrastructure

Policy Recommendations

- 1. Declare solar-powered Bitcoin mining as a strategic digital export industry
- 2. Allow direct PPA (Power Purchase Agreements) between solar producers and miners
- 3. Integrate Bitcoin mining into solar subsidies (PM-KUSUM, solar parks, off-grid models)
- 4. Create a regulatory sandbox for solar-mining clusters
- 5. Provide GST waivers on equipment imported for clean energy mining
- 6. Encourage containerized, mobile mining units in overproduction zones

Implementation Roadmap

- Partner with MNRE, SECI, and state NREDA agencies
- Launch 3 "Digital Solar Sink" pilots in high-curtailment zones
- Use Bitshala and local ITIs to train technicians in mining operations
- Integrate real-time monitoring via open APIs for transparency

Vision Statement

"Bitcoin lets India export its sunlight — instantly, digitally, and with sovereignty."

Instead of dumping excess electrons, India can convert them into programmable, incorruptible capital. This policy unlocks a future where **every photon counts**.



Monetizing Curtailable Wind Energy Through Bitcoin Mining

Executive Summary

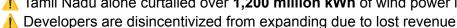
India's wind power capacity is vast and underleveraged, especially during low-demand hours. In key wind corridors like Tamil Nadu, Karnataka, Maharashtra, and Gujarat, surplus generation leads to curtailment — wasting gigawatt-hours of clean energy.

Bitcoin mining enables India to convert this curtailed energy into digital value, generating foreign exchange and employment while stabilizing local grids.

The Problem: Unused Wind Energy

India's installed wind capacity (2025): ~45 GW

- High wind months (June-September) oversupply the grid
- Night-time surplus: Wind often peaks when demand is low
- Curtailment by DISCOMs due to grid limitations, regulatory caps



⚠ Tamil Nadu alone curtailed over 1,200 million kWh of wind power in 2022.

The Opportunity: Bitcoin as the Buyer of Last Resort

Bitcoin miners offer:

- Flexible load matching ramp up when wind surges, pause when demand rises
- **Distributed demand** colocated with wind farms, easing grid congestion
- New revenue stream for wind operators, local panchayats, and investors
- **Digital export income** no physical logistics needed

Strategic Wind Corridors for Mining

State	Wind Generation Clusters	Mining Suitability
Tamil Nadu	Tirunelveli, Thoothukudi, Coimbatore	Very High
Karnataka	Chitradurga, Davanagere, Gadag	High
Maharashtr a	Satara, Sangli, Ahmednagar	High
Gujarat	Bhuj, Porbandar, Jamnagar	Medium-High

Global Precedents

- **B** Denmark: Uses wind + digital infrastructure to monetize surplus energy
- Spain: Exploring Bitcoin mining integration with wind cooperatives
- Inner Mongolia (pre-2021): Used stranded wind to mine BTC at low cost
- Nebraska/Texas: Wind-solar hybrid farms mining Bitcoin with flexible loads

Case Study: Tamil Nadu Wind + Mining Pilot

- 5 MW wind farm + 1 modular container (1.5 MW mining load)
- Curtailed power used for BTC mining at night
- Estimated yield: ~60 BTC/year
- At ₹1 crore/BTC → ₹60 crore/year in digital value
- Result: Revenue boost to wind operators, better grid frequency, local employment

Economic Potential

- 1 MW wind → ~1 BTC/month under flexible curtailment
- **100 MW** → ~1,200 BTC/year = ₹1,200 crore/year

Wind mining creates:

- High uptime digital infrastructure
- Revenue for renewable energy firms
- Non-extractive digital exports

Environmental & Social Benefits

- Monetizes green energy without emissions
- Incentivizes more wind investment
- Generates rural tech jobs in O&M, hardware, logistics
- Reduces wastage of taxpayer-funded wind infrastructure

Policy Recommendations

- 1. Legalize colocated mining at wind sites with excess capacity
- 2. Allow direct sale of curtailed wind power to miners via open PPAs

- 3. Offer Viability Gap Funding for pilot projects via MNRE
- 4. Support **mobile mining rigs** to follow wind output seasonally
- 5. Encourage **community wind cooperatives** to monetize via mining

Strategic Partners

- IWTMA (Indian Wind Turbine Manufacturers Association)
- NTPC Green Energy
- ReNew Power, Suzlon, Greenko
- Local DISCOMs, SECI, and Bitshala for education

Vision Statement

"India's wind should not die in the wires. Let it echo across the Bitcoin network."

By pairing its abundant wind with open-source digital infrastructure, India can pioneer a climate-aligned, sovereignty-enhancing monetary export model.



Converting Industrial Energy Oversupply into Digital Exports through Bitcoin Mining

Executive Summary

India's rapid industrial expansion has led to **pockets of energy surplus** where power infrastructure outpaces localized demand — particularly in **Odisha**, **Jharkhand**, **Chhattisgarh**, **Madhya Pradesh**, and **Eastern Maharashtra**. These **grid-constrained zones** often curtail electricity due to **transmission bottlenecks**, **regulatory caps**, **or low off-peak demand**.

Instead of wasting this energy, India can **monetize it instantly** using **Bitcoin mining** — turning excess electrons into **sound money** and creating a new revenue stream for both public and private power generators.

The Problem: Energy Infrastructure Outpaces Load Growth

Key industrial corridors were built with future demand in mind, but:

- Transmission lines are incomplete or under capacity
- Industrial off-takers often operate below projected capacity
- Discoms and NTPC often curtail generation, especially at night

▲ Example: Talcher–Angul belt in Odisha, with 7+ GW installed capacity

⚠ Example: Korba in Chhattisgarh — curtailed thermal output due to low demand

⚠ Example: Eastern MP — wind-solar hybrids generate idle power at night

The Opportunity: Bitcoin as Infrastructure Monetizer

Bitcoin mining can:

- Soak up curtailed power at thermal, hydro, or hybrid sites
- Be modular and mobile: run next to generation, no need for full grid access
- Help generators recoup investments, even before transmission upgrades
- Buy at marginal cost, but yield high-value digital export (₹1 crore/BTC)

Target Zones

Region	Energy Source	Grid Issue	Suitability
Angul-Talcher (Odisha)	Thermal + Hydro	Low industrial uptake	Very High
Korba (Chhattisgarh)	Thermal + Solar	Night curtailment	High
Dhanbad (Jharkhand)	Thermal	Demand mismatch	Medium
Vindhya Basin (MP)	Wind + Solar hybrid	Undeveloped load centers	High
Chandrapur (Maharashtra)	Thermal	Regulatory throttling	Medium

Case Study: Talcher Thermal + Bitcoin Mining

- Colocation at NTPC site with 500 MW capacity
- 10 MW of surplus off-peak power diverted to modular mining container
- Monthly yield: ~10 BTC = ₹10 crore/month
- Annual potential: 120 BTC = ₹120 crore
- Impact: Efficient asset utilization, grid stability, tax income

Financial Projection

1 MW of stable off-peak power = ~1 BTC/month
 100 MW = 1,200 BTC/year = ₹1,200 crore/year

This doesn't require new generation — just **smart deployment** of already wasted power.

Environmental & Operational Gains

- No added emissions (uses pre-existing generation)
- Improves PLF (plant load factor) for legacy thermal plants
- Uses stranded infrastructure: substations, transformers, wiring
- Encourages localized digital infra jobs

Policy Recommendations

- 1. Enable mining colocation at NTPC, SECI, and state thermal plants
- 2. Open PPA mechanism for miners to buy excess capacity at marginal cost
- 3. Allow SEZs to host energy-backed mining clusters
- 4. Include Bitcoin mining in Power Export Promotion Zones (PEPZ)
- 5. Incentivize DISCOMs to use mining as a grid-balancing tool

Strategic Partners

- NTPC, DVC, SECI, PGCIL
- **Private thermal operators** like Tata Power, Adani
- Bitshala for training engineers in mining infra O&M
- Energy regulators to craft flexible peak-off-peak pricing

Vision Statement

"India built the grid. Now let the grid build digital wealth."

By pairing underused infrastructure with sovereign digital money, India can pioneer a new model of industrial monetization without pollution, debt, or export dependency.

Bitcoin Mining Framework for India (2025)

Turning Stranded, Surplus, and Renewable Energy into National Digital Wealth

Executive Summary

India's energy sector produces far more power than it can consistently consume or transmit particularly from hydro, solar, wind, and thermal overcapacity. Currently, this surplus is curtailed, wasted, or underutilized.

Bitcoin mining provides a sovereign, neutral, programmable energy buyer — capable of monetizing energy instantly from any region, any time, and at any scale. By using mining as a tool, India can turn surplus power into digital exports without the need for physical infrastructure like ports or pipelines.

This framework outlines four key energy corridors that can be activated to transform India's energy landscape:

- 1. Himalayas (Untapped Hydro)
- 2. Solar Belt (Midday Curtailment)
- 3. Wind Zones (Night Surplus)
- 4. Grid-Curtailed Energy (Industrial Surplus)



1. The Case for Bitcoin Mining in India

- Bitcoin = Energy + Security + Open Internet Value Transfer
- Price (2025): ₹1 crore ≈ 1 BTC
- 1 MW = ~1 BTC/month → ₹1 crore/month potential per MW
- Mining is modular, location-agnostic, interruptible
- No need for end users, factories, or cities nearby

India's competitive advantages:

- Lowest cost renewables globally
- Massive underutilized capacity
- Skilled engineering base
- Political alignment with digital public goods



🔔 2. Himalayas: Unlocking India's Hydro Frontier

Context:

Himachal Pradesh, Uttarakhand, Arunachal Pradesh, and parts of J&K hold vast hydroelectric **potential** — most of it untapped due to terrain, demand mismatch, and seasonal variation.

- Only ~30% of NE & Northern hydro potential is utilized
- River-fed plants often run at reduced capacity
- Remote locations lack industrial off-takers

Opportunity:

- Deploy modular mining units at dam sites
- Monetize seasonal excess and nighttime flow
- Enable local employment + site maintenance income

Economic Projection:

- 100 MW cluster in Arunachal = ~1,200 BTC/year = ₹1,200 crore/year
- Local economic boost without displacement or emissions

Policy Recommendations:

- Greenlist mining at remote dam sites
- Allow NTPC, NHPC, and state hydro bodies to lease access to miners
- Create sovereign hydro-mining special zones



🔆 3. Solar Belt: Monetizing Midday Curtailment

Context:

Rajasthan, Gujarat, Telangana, and Madhya Pradesh generate abundant solar power, much of which is curtailed due to:

- Oversupply during the day
- Limited battery deployment
- Discom resistance to 24/7 purchase

Opportunity:

- Use Bitcoin mining to absorb midday surplus
- Deploy containers next to solar parks
- Share revenue between solar IPPs, DISCOMs, and grid operators

Economic Projection:

- 1 MW solar → ~1 BTC/month = ₹12 crore/year
- 100 MW midday surplus = ₹1,200 crore/year in mined BTC

Policy Recommendations:

- Enable open-access PPAs for mining
- Integrate mining into solar park tenders
- Incentivize mining as an alternative to curtailment penalties

💨 4. Wind Zones: Monetizing Night Power

Context:

Tamil Nadu, Karnataka, Maharashtra, and parts of Gujarat have high nighttime wind **generation** — underused due to:

- Peak consumption during the day
- Poor storage infrastructure
- Lack of dynamic pricing

Opportunity:

- Mining is interruptible and can operate at night
- Modular setups can colocate at wind sites
- Stabilizes revenue for wind farms

Economic Projection:

- 50 MW wind night surplus = 600 BTC/year = ₹600 crore
- Improves capacity factor + grid predictability

Policy Recommendations:

- Allow dynamic PPA pricing for interruptible offtake
- Co-locate mining clusters in wind-rich districts (e.g., Kanyakumari, Satara)
- Create grid-balancing incentives for mining operators

5. Grid-Curtailed Energy: Industrial Power Corridors

Context:

Industrial belts in **Odisha, Jharkhand, Chhattisgarh**, and **Eastern Maharashtra** were built with future demand in mind. However:

- Transmission bottlenecks
- Regulatory throttling
- Slow industrial uptake

...means power is often curtailed or sold at loss.

Opportunity:

- Plug mining units directly into power stations
- Use off-peak thermal/hydro output
- Build SEZs focused on energy-to-Bitcoin conversion

Economic Projection:

- Talcher (Odisha) + Korba (Chhattisgarh) = potential for 200 MW
- 200 MW → ~2,400 BTC/year = ₹2,400 crore/year

Policy Recommendations:

- PPA route for stranded generators to mine Bitcoin
- Include mining in Digital Export SEZs
- Use mining to monetize legacy thermal sites without new emissions

Strategic Impact



- Monetize otherwise wasted energy
- Add non-inflationary digital asset to national balance sheet
- Earn global Bitcoin instead of exporting coal/gas

Infrastructure

- Improve plant load factors
- Use mining to finance renewable overbuild
- Reduce reliance on subsidized cross-subsidy grid models

Geopolitical

- Establish India as energy-fintech leader
- Offer a sovereign hedge to IMF/dollar dependencies
- Join BRICS and Global South in Bitcoin energy alignment

Implementation Framework

- Phase 1 (2025–26): Pilot in Solar + Hydro zones (Gujarat, Arunachal)
- Phase 2 (2026–27): National PPA mechanism for miners
- Phase 3 (2027+): Mining SEZs, sovereign fund-backed public miners

Partners:

- NTPC, NHPC, SECI, PGCIL
- Bitshala for mining education & training
- Private energy IPPs
- Digital infrastructure startups

The Vision

"India built the world's cheapest power. Now let that power build digital wealth."

Bitcoin mining isn't just a financial opportunity — it's an **energy strategy**, a **sovereign hedge**, and a **geopolitical lever**. By embracing mining as a national priority, India can lead the **energy-to-digital transition** for the Global South.

Legal Recognition & Clarity

Define Bitcoin as Private Digital Property & Reform India's Tax Treatment for Long-Term Holders

Executive Summary

India is on the cusp of a historic economic transition. As global confidence in fiat currencies erodes and digital assets reshape capital markets, Bitcoin has emerged as a neutral, decentralized, and incorruptible form of digital property. However, in India, the lack of legal recognition and the imposition of punitive taxation policies have stifled innovation, undermined individual rights, and pushed talent and capital abroad.

This paper proposes a focused and actionable reform: legally recognizing Bitcoin as private digital property under Indian law and creating a tax regime that encourages long-term holding rather than penalizing savers. By doing so, India can protect citizen sovereignty, align with global trends, and take its rightful place as a leader in the digital monetary revolution.

1. Current Legal Landscape in India

Bitcoin operates in a legal gray area in India. While not banned, it lacks formal recognition as property, asset, or legal tender.

Legal Ambiguities:

- No Definition in Indian Law: Bitcoin is not currently classified under any property, security, commodity, or currency category.
- Supreme Court Ruling (2020): Struck down the RBI's 2018 ban on banking access for crypto businesses, reaffirming the legality of use.
- Taxation Regime (Post-2022):
 - Section 115BBH: 30% flat tax on all virtual digital asset (VDA) gains, with no deductions or loss offsets.
 - Section 194S: 1% Tax Deducted at Source (TDS) on all crypto transactions.
- No Protection Under Contract Law: Bitcoin transactions fall into legal uncertainty when used in contracts, inheritance, or as collateral.

These unresolved ambiguities lead to regulatory arbitrage, brain drain, capital flight, and fear-based policymaking. The law must now evolve to reflect technological and economic reality.

2. Policy Recommendations

A. Define Bitcoin as Private Digital Property

Proposal: Amend Indian statutes to recognize Bitcoin as a form of *movable digital property*, distinct from other digital assets.

Required Legal Changes:

- Amend the Indian Contract Act (1872) to allow digital property transfers via Bitcoin.
- Amend the Sale of Goods Act (1930) to accommodate digital bearer assets.
- Clarify classification under the Transfer of Property Act (1882) to allow inheritance, donation, and trust-based holding of Bitcoin.

Outcome:

- Grants Bitcoin legal standing in commercial, civil, and family law.
- Protects Indians' right to own and transact in Bitcoin as an asset class.
- Enables institutional custody, financial services, and secure transmission of generational wealth.

B. Reform Taxation to Encourage Long-Term Holding

Proposal: Create a *long-term capital gains (LTCG)* framework for Bitcoin, with exemptions or benefits for holding periods exceeding 3 years.

Key Tax Policy Recommendations:

- Classify Bitcoin held >36 months as a long-term capital asset.
- Apply LTCG rate of 20% with indexation benefit (like gold or real estate).
- Eliminate 1% TDS (Section 194S) for KYC-compliant platforms to reduce transaction friction.
- Allow loss offsets across the same fiscal year to encourage legitimate portfolio management.

Why This Matters:

- Current 30% tax discourages long-term saving and wealth preservation.
- Indian investors are moving to foreign platforms or underground P2P markets.
- A clear and fair tax structure would encourage compliance, repatriate capital, and promote innovation.

3. Global Comparison

Country	Legal Status of Bitcoin	Tax Treatment	Remarks
Germany	Private money	0% tax if held >1 year	Encourages saving
Japan	Legal form of payment	Capital gains based on volume	Institutional clarity
USA	Property (IRS)	LTCG after 12 months	Taxable but recognized
Portugal	Not taxed for individuals	0% capital gains	Crypto haven
El Salvador	Legal tender	No capital gains tax	Full legal clarity
India	Unrecognized asset (VDA)	30% flat + 1% TDS + no offset	Discourages usage and holding

4. Strategic Benefits for India

- Capital Retention: Reduces outflow to offshore exchanges and banking channels.
- Sovereign Savings: Enables citizens to preserve wealth in an inflation-resistant form.
- Legal Certainty: Reduces future litigation risks and enables digital inheritance planning.
- Economic Competitiveness: Attracts global Bitcoin businesses to India's skilled and technical workforce.
- Civil Liberty Protection: Recognizes the individual's right to own self-custodied property.

5. Illustrative Legal Language

"Bitcoin shall be defined as a form of privately held digital property, not being legal tender or regulated security, and shall enjoy all protections afforded to movable property under the Constitution and applicable statutes."

"Transfers or inheritance of Bitcoin shall be lawful and recognized under the Indian Contract Act, 1872, and related civil statutes."

"Long-term capital gains from Bitcoin held continuously for 36 months or more shall be taxed as per applicable LTCG rules, with indexation benefits. No TDS shall apply to such transactions conducted via registered Indian platforms."

6. Addressing Concerns

Concern
Response
"Bitcoin is used for crime"
"It's too volatile"
Volatility is a short-term function; long-term returns outweigh inflation erosion.
"It threatens the rupee"
Bitcoin is not a currency replacement; it's a store of value.
"It will lead to tax evasion happens in all asset classes—clarity improves compliance.

7. Implementation Roadmap

Phase	Action
Q4 2025	Form inter-ministerial task force (RBI, Finance, MeitY, BPI, lawmakers)
Q1 2026	Submit draft bill on Bitcoin legal classification
Q2 2026	Amend Income Tax Act to include LTCG provision
Q3 2026	Remove 1% TDS from recognized platforms
Q4 2026	Launch public awareness campaign and legal guide for citizens

8. Annex: Legal References

- Indian Contract Act, 1872
- Sale of Goods Act, 1930
- Income Tax Act, Sections 115BBH & 194S
- Transfer of Property Act, 1882
- Supreme Court Judgement Internet & Mobile Association of India v. RBI (2020)

Conclusion: A Legal Foundation for India's Bitcoin Future

India is not late — it is early enough to lead. But leadership requires courage and clarity.

By legally recognizing Bitcoin as private digital property and reforming tax policy to encourage long-term savings, India can empower its citizens, strengthen its economy, and take a sovereign stand in the age of digital money.

Mining & Energy Monetization

Turn Stranded Energy into Digital Asset and Incentivize Bitcoin Mining Using Renewables

Executive Summary

India's energy landscape is rich, diverse, and underutilized. From untapped hydroelectric power in the Himalayas to curtailed solar generation in the desert states, India wastes gigawatts of potential energy every year due to grid inefficiencies, lack of transmission infrastructure, and market saturation during off-peak hours.

Bitcoin mining offers a historic opportunity: a buyer of last resort for electricity, a monetization engine for stranded and surplus energy, and a sovereign way to export digital value using Indian resources—without shipping a single product.

This paper proposes a framework for integrating **Bitcoin mining into India's energy strategy**, following the examples of Bhutan, the United States, Oman, and others. By embracing energy monetization through mining, India can strengthen its grid, create jobs, attract foreign capital, and establish itself as a hub for clean digital asset production.

1. Context: Energy Abundance Meets Monetization Opportunity

India is the 3rd largest producer and consumer of electricity globally, yet struggles with energy losses, overproduction during peak solar hours, and an inability to monetize remote generation.

Key Issues:

- Stranded Renewables: Excess solar during peak afternoon hours is often curtailed in Rajasthan, Gujarat, and Karnataka.
- Wasted Hydropower: States like Sikkim, Arunachal Pradesh, and Himachal Pradesh generate more hydroelectricity than they consume locally.

- **Weak Grid Infrastructure**: In remote or mountainous regions, power cannot reach urban demand centres efficiently.
- **Incentive Imbalance**: Surplus producers are disincentivized to build more due to lack of guaranteed monetization.

Bitcoin mining can act as a **mobile**, **interruptible**, **geographically flexible energy sink**—buying power no one else can, when no one else will.

2. International Examples

Bhutan: Hydroelectric + Bitcoin Mining = Digital Sovereignty

- Bhutan, with a population of 800,000, mines Bitcoin using surplus hydropower from its rivers
- In partnership with firms like **Bitdeer**, Bhutan has allocated **hundreds of megawatts** to monetize unused electricity.
- Revenues are directed to **national development** while maintaining 100% renewable mining operations.
- Bitcoin mining has enabled Bhutan to export value digitally—without leaving its borders.

Texas, USA: Stabilizing the Grid with Flexible Load

- Texas grid operator ERCOT integrates Bitcoin miners as controllable load resources.
- During power demand surges, miners **shut off instantly**, returning capacity to the grid.
- Miners are paid to turn off, helping prevent blackouts and reduce price spikes.
- Bitcoin mining helps **finance wind and solar farms** that would otherwise be unviable.

Coman: Turning Flaring Gas into Bitcoin

- Oman is using excess natural gas (which would otherwise be flared or wasted) to mine Bitcoin.
- Converts a waste liability into a digital asset.
- Attracts foreign investment while improving environmental metrics.

🗾 Kazakhstan & 📷 Russia: Monetizing Fossil Energy

 Use coal and gas for mining; India can leapfrog by focusing on renewables and stranded hydro.

3. Policy Recommendations for India

A. Classify Bitcoin Mining as Strategic Energy Export

- Define Bitcoin mining as a form of "digital energy export".
- Recognize it under India's Foreign Trade Policy (FTP).
- Allow mining operations to be treated like export-oriented units (EOUs) or special economic zones (SEZs).

B. Utilize Renewable and Wasted Energy

- Incentivize mining with **time-of-day tariffs** for:
 - Excess solar (11AM–4PM)
 - Nighttime wind
 - Run-of-river hydro in monsoon regions
- Establish "Digital Power Parks" in:
 - Ladakh & Arunachal (hydro)
 - Rajasthan & Gujarat (solar)
 - Coastal Tamil Nadu (wind)
- Enable **private-public partnerships** with DISCOMs and energy producers.

C. Simplify Compliance and Incentivize Participation

- Create a **national mining license framework** under MeitY & Ministry of Power.
- Enable easy KYC/AML compliant energy purchases.
- Offer import duty exemptions for mining hardware in SEZs.
- Offer 5-year tax holidays for renewable-based mining units with net metering capacity.

Donofit

4. Benefits to India

Catogory

Category	Benefit
Energy	Monetize stranded power, stabilize grid load, reduce curtailment
Economy	Attract foreign capital, generate export revenue, support Make-in-India electronics
Jobs	Data center maintenance, electrical & civil engineers, cooling systems, logistics
Sustainability	Fund solar/wind expansion through revenue from Bitcoin
National Security	Reduce dependency on USD-based remittance networks

5. Roadmap for Implementation

Phase	Actions
Q4 2025	Form task force with Ministry of Power, MeitY, MNRE
Q1 2026	Launch Digital Power Pilot Zones in 3 renewable-rich states
Q2 2026	Introduce Bitcoin mining SEZ framework in Union Budget
Q3 2026	Incentivize mining via low-cost grid tariffs during surplus periods
Q4 2026	Partner with private players to build 1st Digital Energy Export Hub

6. Addressing Common Concerns

Concern	Response
"Bitcoin mining wastes energy"	Mining uses wasted or curtailed energy that has no other buyer.
"It increases emissions"	India can prioritize mining only with renewable, stranded, or curtailed energy.
"It strains the grid"	Bitcoin miners are interruptible and reduce grid stress, not increase it.
"It's not strategic"	Mining monetizes energy, boosts exports, and supports digital infrastructure.

7. Suggested Policy Clauses (Illustrative)

"Bitcoin mining using renewable, surplus, or stranded electricity shall be classified as a form of digital export under India's energy and trade frameworks."

"Operators engaged in such mining shall be eligible for tariff incentives, tax exemptions, and SEZ benefits, provided the electricity used is non-subsidized, traceable, and meets environmental standards."

"The Ministry of Power and MeitY shall jointly establish licensing and compliance norms to ensure lawful operation and integration with India's grid architecture."

India's energy surplus is an untapped national asset. Bitcoin mining transforms gigawatts of wasted electricity into sovereign monetary value—without pollution, without exports, without middlemen.

Like Bhutan, we can mine with rivers. Like Texas, we can mine with surplus. Like Oman, we can mine from waste. But unlike anyone else, India can mine with intention—and lead the digital energy revolution of the 21st century.

The world runs on energy. The future will run on *digitally monetized* energy. Let's not wait to import the future. Let's mine it.

Capital Flow Liberalization

Enabling INR-BTC Convertibility, Protecting Savings, and Boosting Economic Freedom

Executive Summary

Capital controls, though designed to manage risk, have become a hidden tax on Indian savers and entrepreneurs. As the world transitions to borderless digital value systems, India must liberalize its capital flows to remain competitive. This section outlines a framework for:

- Legal INR-to-Bitcoin on/off ramps,
- Bitcoin as a voluntary savings vehicle,
- Responsible liberalization of cross-border BTC flows,
- Protection against financial repression.

By enabling frictionless BTC usage, India can:

- Empower citizens with global liquidity,
- Attract foreign capital and talent,
- Build a resilient economic buffer in uncertain times.

1. Bitcoin as a Cross-Border Capital Vehicle

Bitcoin enables the frictionless movement of capital without reliance on traditional FX systems or SWIFT networks. Countries like El Salvador, Switzerland, and the UAE already embrace this utility. India must do the same—on its own terms.

X Policy Recommendations:

- Amend FEMA (Foreign Exchange Management Act) to:
 - Recognize Bitcoin as a permissible digital asset class, distinct from foreign currency.
 - Allow Bitcoin wallets and custodial services to operate domestically.
 - Authorize Bitcoin-denominated remittance flows under RBI supervision.
- Establish licensed Bitcoin-INR exchanges with regulatory oversight.
- Encourage Indian exporters to accept Bitcoin as payment through a sandboxed program via EXIM Bank.

2. Protecting Domestic Savers from Financial Repression

The Indian rupee has depreciated by over **80% against the USD** in the last 30 years. Indian citizens—especially the middle class—face:

- Limited access to inflation-resistant assets,
- High taxes on gold and real estate,
- 30% capital gains tax on Bitcoin (treated as gambling).

This is not financial inclusion—it is financial imprisonment.

X Policy Recommendations:

- Reclassify long-term Bitcoin holdings (1 year+) as a capital asset taxed like equity (10% LTCG).
- Remove 1% TDS on crypto trades to increase market liquidity.
- Allow Bitcoin to be held in tax-advantaged instruments like Digital VPF or NPS Tier

Bitcoin is not a get-rich-quick tool—it is a **get-out-of-financial-oppression tool**.

3. INR-BTC On/Off Ramps: Domestic and Diaspora Use

Today, most Indian BTC transactions rely on:

P2P transfers through Telegram and WhatsApp,

- OTC desks with high premiums,
- International exchanges via VPNs and fake KYC.

This is unsafe, non-transparent, and ultimately pushes innovation offshore.

X Policy Recommendations:

- Establish regulated INR-BTC on/off ramps via:
 - NPCI integration for UPI-based KYC entry,
 - Licensed fintechs and payment aggregators.
- Create a diaspora-friendly Bitcoin channel:
 - Allow NRIs to remit in BTC (with automatic INR conversion),
 - Designate one or more Bitcoin Remittance Sandboxes under RBI and MEITY.

4. Economic Benefits of Liberalization

Benefit	Impact
Remittances	Reduce cost of \$100B/year inbound flow
Fintech Innovation	Enable DeFi, Lightning, micropayments
Talent Retention	Engineers stay in India, not flee abroad
Reserve Diversification	Bitcoin in forex reserves (El Salvador model)
Soft Power	Attract digital entrepreneurs, BTC tourists

International Comparisons

Country	Policy	Impact
Switzerland	Bitcoin-friendly banks, clear tax code	\$4B+ crypto investment inflow
Singapore	Regulated exchanges, zero CGT	Regional fintech hub
Portugal	No crypto tax, open banking	EU Bitcoin migration hotspot
≅ El Salvador	Legal tender BTC, volcano mining	60+ companies relocated HQs

India can forge its **own path**, tailored to its democratic values, tech prowess, and capital needs.



Proposed Legal Language (Sample Draft Amendment)

"Bitcoin shall be recognized under the Foreign Exchange Management Act (FEMA) as a voluntary digital asset not denominated in foreign currency, but convertible. Entities may operate licensed services to facilitate exchange between Bitcoin and Indian Rupees, subject to oversight by the Reserve Bank of India."



Safeguards & Compliance

- Mandatory KYC/AML on all ramps
- Wallet tracing compliance via regulated tools (e.g., Chainalysis)
- Financial education campaigns for safe custody, avoiding scams
- Cap on remittance volume initially for monitoring



Conclusion

Capital must flow as freely as ideas. In the age of Bitcoin, India must transition from capital controls to capital confidence. This means protecting savers, supporting digital entrepreneurs, and allowing voluntary opt-in to the most secure monetary network on Earth.

India missed the Internet banking wave. It cannot afford to miss the **monetary Internet**.

Education, R&D, and Innovation

Building India's Intellectual Backbone for the Bitcoin Century



Executive Summary

India's digital future cannot be built on outdated financial curricula or foreign dependency. As Bitcoin and decentralized systems become foundational to global finance, cryptography, and energy markets, India must equip its citizens not just to consume technology—but to create and lead it.

This section outlines how India can:

- Integrate Bitcoin into IITs, IIMs, and civil service curricula,
- Promote interdisciplinary Bitcoin research,
- Fund open-source development and innovation.
- Support grassroots education initiatives like Bitshala, and
- Position India as a global hub for decentralized system design.

🎓 1. Bitcoin Curriculum in Higher Education

India's brightest minds are graduating without exposure to the most important innovation in money since independence. Bitcoin's role in:

- Monetary economics,
- Distributed computing,
- Game theory and cryptography,
- Cyber law and public policy
 - ...demands formal academic integration.

X Policy Recommendations:

- Introduce Bitcoin modules in:
 - Computer Science (block structure, PoW, cryptographic hashing),
 - o Economics (sound money, Austrian theory, inflation mechanics),
 - Law (property rights, smart contracts, financial surveillance),
 - Public Policy (civil liberties, energy policy, digital sovereignty).
- Establish Bitcoin Research Chairs at IITs and IISc with private and public funding.
- Support and scale successful grassroots models such as Bitshala, which has:
 - Run Bitcoin workshops in IITs and NITs,
 - Built student-led Lightning and node infrastructure,
 - Mentored early Bitcoin developers across India.

Bitshala has created India's first student-led Bitcoin ecosystem across premier tech institutions. Scaling their model nationally could seed a generation of sovereign technologists.

2. Research & Open Source Development (OSD)

India is rich in developer talent but underrepresented in Bitcoin Core and protocol-level innovation. As a rising tech power, India must:

- Promote public-private research collaborations,
- Build sovereign tooling infrastructure,
- Incentivize **OSS contributions** with grants and recognitions.

X Policy Recommendations:

- Launch the "Bharat Bitcoin Research Grant" program:
 - ₹50 crore annual funding for Bitcoin protocol research,
 - Grants to Indian contributors to Bitcoin Core, LDK, Fedimint, BDK, Lightning, etc.
- Partner with organizations like Bitshala to mentor young contributors and match them with global open-source projects.
- Collaborate with MEITY and DST to create Bitcoin Research Labs focused on:
 - Layer 2 protocols,
 - Sovereign node design,
 - Hardware wallet security,
 - Bitcoin–energy modeling.
- Create a Bitcoin Public Code Fund, modeled on GitHub Sponsors + IndiaStack incentives.

3. India as a Bitcoin Innovation Hub

India has a world-class developer base, English fluency, global diaspora, and startup energy. What's missing is regulatory clarity and institutional support.

X Policy Recommendations:

- Create Special Innovation Zones:
 - Regulatory sandboxes for Bitcoin Lightning apps, Layer 2 fintechs, and custody startups.
 - Startup India fast-track for open-source Bitcoin infra ventures.
- Support Bitcoin DevCon India an annual global event for builders, researchers, and policymakers.
- Empower communities like Bitshala to run builder camps, privacy workshops, and node-running bootcamps across Indian campuses and Tier-2 cities.

International Benchmarks

Country	Education Initiatives	Impact
USA	MIT Digital Currency Initiative	Leading cryptography & protocol R&D
Germany	Frankfurt School Bitcoin lectures	Public–academic collaboration model
≅ El Salvador	"My First Bitcoin" national program	>250,000 students trained since 2021
Switzerland	University of Basel Bitcoin program	Academic-industry pipeline
India	Bitshala Movement	1st campus-native Bitcoin developer ecosystem

India can build a **decentralized knowledge economy** with global-first ambitions and local-first relevance.

Core Infrastructure Needed

Pillar	Description
Academic Nodes	Bitcoin learning cells in IITs/NITs
Research Funds	Open grants for OSS devs, researchers
Paculty Upskilling	Training modules for professors
Online Courses	Government–private MOOCs
Startup Sandboxes	Bitcoin-native R&D ecosystems
	Support for communities like Bitshala, Satoshi Centre, etc.

Proposed Initiatives

1. Bharat Bitcoin Fellowship

- 3-month builder cohort for Indian university students
- ₹50,000 stipend + mentorship + final showcase
- Partner with **Bitshala** to co-design the curriculum and mentorship model.

2. Bitcoin in college curriculum

- Modules on Bitcoin, surveillance finance, and sovereign money for:
 - IAS probationers at LBSNAA
 - College Students

3. Bitcoin Curriculum Portal

- Open-source, multilingual content repository
- Printable guides, animated explainers, regional language translations

🔚 Conclusion

India's youth are not just the future of this country—they are the future of global digital freedom. Bitcoin is not merely a financial asset, but a **technological and philosophical breakthrough** that will define the 21st century.

"Bitcoin is not taught in India yet. But the ones who teach it—like Bitshala—are already shaping the world."

India must invest in building a generation that understands, builds on, and protects the Bitcoin network—not one that fears or bans it.

Bitcoin Policy Institute of India 2025

A Vision for Sovereign Digital Infrastructure

India, with its thriving digital public infrastructure and youthful population, is poised to lead the next monetary revolution. As the global financial system faces mounting debt, surveillance, and exclusionary capital controls, **Bitcoin offers India a neutral, open-source alternative** — one that protects individual liberty, promotes energy innovation, and enables borderless growth.

This policy lays out six key pillars to responsibly and strategically integrate Bitcoin into India's economy — for the people, by the people.

1. Legal Recognition & Clarity

Objective: Provide unambiguous legal classification for Bitcoin, empowering individuals and institutions to own and use Bitcoin securely under Indian law.

Key Proposals:

- Classify Bitcoin as "private digital property", not as currency or security. This
 separates Bitcoin from volatile, centralized tokens and protects it from miscategorization
 under the VDA (Virtual Digital Asset) regime.
- Exempt long-term holders (2+ years) from capital gains tax to incentivize savings and financial discipline.
- **Guarantee the right to self-custody** the ability to hold and transact Bitcoin directly without custodians under Article 300A of the Constitution (Right to Property).
- **Protect peer-to-peer transactions** as a basic constitutional freedom analogous to the right to own gold, cash, or other movable property.

Why This Matters:

India's current legal ambiguity risks driving innovation offshore and criminalizing everyday users. Clear, asset-based recognition of Bitcoin will:

- Reduce legal risk for builders and investors
- Enable long-term savings
- Ensure compliance pathways for businesses

Bitcoin is not a security. It's not a company. It's digital property owned and secured by millions worldwide — including Indians.

2. / Mining & Energy Monetization

Objective: Use Bitcoin mining to monetize wasted, stranded, or curtailed energy, transforming electricity into sovereign digital reserves.

Key Proposals:

- Recognize Bitcoin mining as a digital export, especially when powered by renewables and surplus generation.
- Legalize and incentivize zero-emission mining using hydro, solar, wind, and flare gas mitigation technologies.
- **Create Digital Energy Zones** near remote energy sites to deploy containerized Bitcoin miners and monetize excess production.

Global Examples:

- Bhutan mines Bitcoin using hydropower to boost state revenues while preserving energy sovereignty.
- **El Salvador** mines Bitcoin with geothermal volcano power, building a digital treasury from stranded energy.

India-Specific Potential:

- India wastes 25–30 TWh of electricity annually due to transmission losses and grid curtailments.
- This could mine **up to 150,000 BTC/year**, turning otherwise wasted energy into hard digital reserves.
- Mining at dams, solar farms, or gas flares could make energy projects profitable faster and help balance the grid.

Outcome:

- Improves grid efficiency
- Attracts foreign capital for energy innovation
- Builds Bitcoin reserves from Indian energy not foreign currency

With Bitcoin, India can export energy without building a single pipeline.

3. Z Capital Flow Liberalization

Objective: Enable legal, seamless, and regulated INR–BTC transactions for individuals, startups, and financial institutions.

Key Proposals:

- Enable INR-BTC on/off ramps under clear RBI licensing, avoiding legal uncertainty.
- **Replace the 1% TDS** on crypto transfers with a rational, holding-based capital gains framework similar to equity LTCG tax.
- Allow peer-to-peer transfers and self-custody without penal restrictions or overreach.

Context:

The current policy penalizes Indian exchanges and pushes users to offshore or gray markets. Users face:

- 30% flat capital gains tax
- 1% TDS on every trade
- No deduction of losses

Solution:

Treating Bitcoin like digital property (not a risky VDA or speculative token) will:

- Bring capital back onshore
- Boost Indian exchange growth
- Give citizens a savings option beyond gold, real estate, and depreciating fiat

Capital should flow with freedom — not be caged in fear.

4. 📚 Education, R&D, and Innovation

Objective: Position India as a global leader in Bitcoin research, development, and open-source innovation.

Key Proposals:

- Introduce Bitcoin and decentralized systems curriculum in IITs, IIMs, NITs, IIITs, and central universities.
- Fund research labs and centers of excellence for cryptography, distributed computing, and monetary systems.
- Support developer training and full node operations, ensuring India contributes to protocol development.

Grassroots Impact:

- **Bitshala** is India's first grassroots Bitcoin education initiative bringing technical workshops, reading groups, and privacy tools to leading campuses.
- Students from IIT Madras, IIT Bombay, and IISc are actively participating in Bitcoin open-source research.

Outcome:

- Reduces dependence on foreign protocols and financial rails
- Empowers Indian engineers to build the next generation of decentralized infrastructure
- Creates domestic employment in cryptographic tech and hard-money finance

Bitcoin is not just code — it's India's entry into the digital monetary era.

5. Privacy & Civil Liberties

Objective: Ensure that financial privacy, self-custody, and freedom to transact remain protected in India's digital future.

Key Proposals:

- **Uphold financial privacy** as a constitutional right under the Supreme Court's 2017 *Puttaswamy* judgment.
- Restrict mass surveillance tools, including blockchain analytics used without court-sanctioned oversight.
- Exempt low-value, peer-to-peer transactions from heavy KYC/AML requirements similar to cash and gold use.

Context:

As CBDCs and global surveillance tools rise, Bitcoin stands as a digital shield for civil liberties.

India must:

- Avoid "surveillance finance" policies that treat all users as suspects
- Champion individual privacy as essential to a healthy democracy

Privacy is not a privilege. It is a human right.

6. S Global Integration

Objective: Use Bitcoin to strengthen India's role in cross-border finance, trade, and global monetary alignment.

Key Proposals:

• **Integrate Bitcoin with UPI** using Lightning Network bridges to enable instant, low-fee international transfers.

- **Build bilateral Bitcoin corridors** with Gulf countries, Southeast Asia, Africa, and BRICS partners.
- Allow Bitcoin reserves for trade in non-USD settlements, strengthening BRICS monetary autonomy.

Remittance Revolution:

• India is the world's largest remittance recipient (~\$125B/year).

Average remittance fee: 6–7%Bitcoin Lightning fee: ~0.002%

• Delivery time: ~3 seconds

Outcome:

- Reduce diaspora remittance fees
- Build a digital trade surplus
- Strengthen India's monetary independence

Bitcoin is not a threat to India. It is India's global opportunity.

Conclusion: India's Bitcoin Moment

This is not just about technology. It's about sovereignty.

Bitcoin gives India:

- A neutral, apolitical asset base
- A chance to monetize local energy
- The tools to defend privacy and empower youth

With foresight and courage, India can lead the world into a digital monetary future — one where power flows not from empires, but from protocols.

Bitcoin Policy India 2025

Crafted by citizens, builders, and educators who believe in a sovereign India.

"Opt out of decay. Opt into strength. Choose Bitcoin."

Global Integration

Making India a Leader in the Global Bitcoin Economy

Executive Summary

Bitcoin is more than an asset—it's a protocol for global economic freedom. As countries around the world grapple with inflation, capital controls, and an increasingly politicized financial system, Bitcoin offers India a chance to **lead the monetary future**, **not follow**.

India's embrace of Bitcoin can:

- Increase geopolitical influence across the Global South,
- Establish a new export industry (hashpower, trust, and remittances),
- Create the foundation for decentralized digital diplomacy,
- And modernize remittances via cross-border UPI integrations.

1. Establish India as a Bitcoin-Positive Nation

India must publicly recognize Bitcoin as **private digital property**, protected under law, and encourage its use for innovation, trade, and public infrastructure.

X Policy Actions:

- Affirm Bitcoin's legal status under property and IT laws.
- Integrate Bitcoin as an optional payment or value layer in India Stack 2.0.
- Launch a Bitcoin-forward communications campaign via MEITY, RBI, and NPCI.

India's regulatory clarity can attract global investment and set the tone for the Global South.

2. Forge Strategic Bitcoin Alliances with the Global South

As nations increasingly reject Western monetary hegemony, India can lead a **Global Bitcoin Alliance** alongside countries like El Salvador , Nigeria , Bhutan , and Argentina ...

X Policy Actions:

- Establish a Bitcoin Desk within MEA and NITI Aayog.
- Co-develop energy-sharing and mining agreements with nations rich in hydro or stranded energy.
- Promote Bitcoin-based settlement rails for international aid and commerce.

India can be a **partner in sovereignty**, not a creditor in chains.

→ 3. Turn Bitcoin Mining into a Clean Digital Export Industry

With surplus hydro, solar, and curtailed grid energy, India can convert underutilized power into Bitcoin—a **clean**, **exportable digital commodity**.

Case Study: Bhutan 3

Bhutan secretly mined Bitcoin using hydro surplus, turning wasted energy into strategic reserves. India's massive energy surplus could mine **over 20,000 BTC/year**, contributing to both economic and grid stability.

X Policy Actions:

- Establish Special Mining Zones powered by renewables and stranded energy.
- Treat mining as a form of "digital energy export."
- Allow private and public partnerships in sovereign hashpower strategies.

Like Saudi Arabia exported oil, India can export clean hashpower.

4. Cross-Border UPI with Bitcoin Rails

India leads the world in digital payments. But cross-border UPI remains constrained by traditional banking corridors. Bitcoin's Lightning Network offers a **neutral**, **instant**, **and low-cost bridge**.

How It Works:

- 1. A user abroad buys BTC and sends it via the Lightning Network.
- 2. Onshore apps instantly convert BTC → INR.

Recipient receives funds in their UPI-linked wallet.

Benefits:

- Reduce remittance fees from 6–7% → <1%
- Enable global real-time payments without SWIFT
- Reach \$150B+ Indian diaspora remittances more efficiently

X Policy Actions:

- Launch a **Lightning–UPI sandbox** with RBI, NPCI, and fintechs.
- Provide licensing pathways for Bitcoin-backed remittance apps.
- Encourage diaspora wallets with UPI-integration and BTC backend.

Bitcoin can make India the world's real-time settlement hub.

📚 5. Train India's Global Bitcoin Ambassadors

India's greatest strength is its youth and talent pool. By training a generation of Bitcoin-savvy engineers, regulators, and diplomats, we can become exporters of Bitcoin public goods and policy.

X Policy Actions:

- Fund Bitcoin Public Policy Fellowships and research centers.
- Introduce Bitcoin curriculum across IITs, IIMs, NLUs.
- Promote Bitcoin study-abroad partnerships with El Salvador, Switzerland, and Nigeria.

6. Advocate for Bitcoin at IMF, FATF, G20

India must actively challenge anti-Bitcoin bias at multilateral bodies and promote open financial standards.

X Policy Actions:

- Push back against FATF's surveillance of non-custodial wallets.
- Oppose IMF pressure campaigns against Global South Bitcoin adoption.
- Propose "Digital Monetary Neutrality" as a core G20 policy goal.

Just as India led the Non-Aligned Movement, we can now lead the **Post-Fiat Alliance**.

Strategic Infrastructure Needed

Domain	Description
Bitcoin Diplomacy Desk	Within MEA for multilateral engagement
→ Hashpower SEZs	Special Energy Zones for sovereign Bitcoin mining
Policy Shield	FATF/G20 resistance and civil liberty protections
📡 Education & Media	Training, narratives, and protocol literacy
→ Cross-Border Payments	Lightning–UPI integration for global remittance

Conclusion

India has always been a civilizational power. In the 21st century, **monetary leadership** is the new diplomacy.

By embracing Bitcoin not as a threat but as a tool for energy efficiency, capital freedom, and global credibility, India can rise as a **non-aligned monetary superpower**.

"We missed the internet. We won't miss Bitcoin."

Charter of the Bitcoin Policy Institute of India (BPI India)

Document Version: 1.1 (Draft for Review)

Date: August 2025

1. The Why: Our Vision for a Sovereign India

Preamble: An India at the Dawn of a New Economic Era

India stands at a pivotal moment in its history. With the world's largest youth population, a thriving digital public infrastructure, and an ambition to become a global leader, our nation's trajectory for the 21st century is being forged today.

However, true sovereignty in a digital age is not just political or military, it is also financial. The global economic system is undergoing a fundamental paradigm shift, moving from an analog, centralized past to a digital, decentralized future. To secure its prosperity and empower its 1.4 billion citizens, India cannot afford to be a spectator. It must be a leader.

We are a group of resident and expatriate Indians, engineers, entrepreneurs, economists, lawyers, and developers, who believe that **Bitcoin is a critical instrument for securing India's sovereign future.**

Our motivation is simple and singular. We are not "crypto" advocates. We are not traders. We are Bitcoiners who see an open, neutral, and secure monetary protocol as a once-in-a-generation opportunity for our homeland. Bitcoin is not merely an asset, it is digital sound money and a global settlement network that embodies the principles of self-reliance (*Atmanirbhar Bharat*) and offers a path to prosperity for everyday Indian.

This institute is founded on the conviction that for India to achieve its full potential, it must understand, adopt, and champion Bitcoin.

Vision Statement:

To forge an India that secures its sovereign financial future and empowers every citizen with economic freedom through the strategic adoption of Bitcoin.

2. The What: The Challenges We Address (Our Mission)

India currently faces a series of interconnected economic challenges that hinder its path to becoming a developed nation by 2047. A lack of clear policy on Bitcoin is not just a missed opportunity, it actively exacerbates these issues. BPI India will focus its efforts on addressing the following critical problems through the lens of Bitcoin:

 Policy Paralysis and Misinformation: The current policy environment is defined by ambiguity and punitive taxation (e.g., the 30% tax and 1% TDS). This is fueled by a fundamental misunderstanding of Bitcoin, often conflating it with speculative, centralized "crypto" projects. This confusion stifles innovation, drives talent and capital abroad, and prevents meaningful discourse.

- Erosion of Citizen Savings: Persistent domestic inflation (averaging over 5% annually) silently erodes the purchasing power and life savings of hundreds of millions of Indians. Traditional assets often fail to provide an adequate hedge, leaving citizens vulnerable.
- **High Cost of Remittances:** India is the world's largest recipient of remittances, with inflows exceeding \$125 billion annually. Yet, legacy financial systems impose an average fee of 4-6%, meaning billions of dollars are lost to intermediaries instead of reaching Indian families.
- Barriers to Financial Inclusion: Despite the success of UPI, tens of millions of Indians remain outside the formal banking system or are underserved by it. They lack access to essential tools for saving, borrowing, and transacting freely.
- **Geopolitical and Monetary System Risk:** Over-reliance on a single foreign reserve currency creates long-term strategic vulnerabilities for the nation's balance sheet in an increasingly multipolar world.

Mission Statement:

The mission of BPI India is to dismantle policy barriers and correct misinformation through data-driven research and education, accelerating the adoption of Bitcoin as both a strategic reserve asset for the nation and an accessible financial tool for the people of India.

3. The How: Our Strategic Pillars of Execution

To execute our mission, BPI India will be organized into five key verticals. These pillars are designed to be synergistic, with research from one pillar informing the actions of the others.

Pillar I: The Sovereign Mining Initiative

This pillar is foundational. It focuses on transforming India's vast natural energy resources into a strategic monetary asset. Bitcoin mining provides a direct path for India to produce a global, non-sovereign store of value on its own soil, reinforcing our national self-reliance.

Tactical Execution:

Pioneer State-Level Mining Partnerships: Actively engage with progressive state governments to create pilot programs for sovereign wealth generation. We will propose a framework to the Chief Minister's Office in energy-rich states like Assam, helping them leverage their significant hydroelectric power, or states like Rajasthan and Gujarat for their solar potential. The goal is a playbook for states to build their own strategic reserves directly from mining, mirroring the successful sovereign mining strategy of neighboring Bhutan.

- Develop a National Mining Policy Framework: Research and advocate for clear, innovation-friendly regulations for Bitcoin mining. This includes policies on energy tariffs for miners, streamlined hardware importation, and legal classification of mining operations to attract domestic and international investment.
- Promote Sustainable Energy Integration: Publish research showing how
 Bitcoin mining can strengthen India's energy grid. We will demonstrate its utility
 as a flexible load balancer, a buyer of last resort for stranded renewables, and a
 catalyst for new investment in sustainable energy infrastructure across the
 country.

Pillar II: Policy Advocacy & Research

To enable sovereign mining and broader adoption, we need a clear and supportive legal environment. This pillar is our core function: to be the premier, data-driven resource for Indian policymakers, regulators, and government bodies.

• Tactical Execution:

- White Papers & Policy Briefs: Publish in-depth analyses on topics like "A Non-Punitive Tax Framework for Bitcoin," "Bitcoin vs. Gold as a Reserve Asset," and "Understanding Proof-of-Work."
- Closed-Door Briefings: Engage directly and constructively with officials at the RBI, Ministry of Finance, and SEBI to provide clear, concise, and factual education, building trust and correcting misinformation.
- Drafting Model Legislation: Proactively create and propose clear, simple legislative text that fosters innovation while addressing legitimate regulatory concerns like KYC/AML.

Pillar III: The Strategic Reserve Initiative

With a clear policy and a domestic production source from sovereign mining, this pillar focuses on the treasury management strategy for holding Bitcoin. We will build the definitive case for India, at both the national and corporate levels, to adopt a Bitcoin treasury strategy as a hedge against inflation and geopolitical risk.

Tactical Execution:

- Develop Treasury Allocation Models: Create frameworks for how a sovereign or corporate treasury should allocate Bitcoin to its balance sheet. This includes modeling the integration of assets produced directly through the Sovereign Mining Initiative, ensuring a seamless flow from production to reserve.
- National Reserve Analysis: Publish a comparative analysis modeling the performance of India's foreign reserves with a small (1-5%) allocation to Bitcoin

- over the last decade, highlighting its non-correlated nature and potential for alpha generation.
- The CFO's Playbook: Create a detailed guide for Indian corporations on the rationale and methodology for adding Bitcoin to their balance sheets as a superior hedge against both currency devaluation and domestic inflation.

Pillar IV: Grassroots Education & Adoption

The ultimate goal of a strong national Bitcoin strategy is to empower the people. This pillar will work to demystify Bitcoin for the Indian populace, ensuring every citizen and business can benefit from this new financial paradigm.

Tactical Execution:

- Vernacular Content: Develop and disseminate educational materials (videos, articles, guides) in Hindi, Tamil, Bengali, Telugu, and other major Indian languages.
- "Proof of Self-Custody" Campaign: Run a nationwide campaign to educate citizens on the importance and methods of holding their own Bitcoin keys, promoting financial self-sovereignty.

Pillar V: Enabling Commerce & Payments

Beyond being a store of value, Bitcoin is a global, open payment network. This pillar is dedicated to accelerating its use as a medium of exchange, empowering Indian businesses and individuals to transact freely and efficiently on a global scale. We will focus on leveraging second-layer technologies like the Lightning Network.

• Tactical Execution:

- Lightning & UPI Integration: Fund research and development into technical solutions that could bridge India's world-class UPI system with the global Lightning Network. The goal is to enable seamless, low-cost, cross-border payments for everyone.
- Merchant Adoption Programs: Launch pilot programs in commercial hubs like Bengaluru or Gurugram to onboard Small and Medium Enterprises (SMEs) to accept Bitcoin. We will provide them with the tools and training needed to reduce transaction fees and access international customers.
- Building Low-Cost Remittance Corridors: Develop a pilot project focused on a key remittance corridor (e.g., UAE-India) to demonstrate the significant cost and speed advantages of using the Lightning Network over traditional systems, ensuring more money reaches Indian families.

BPI India: 2025 Launch Roadmap

August 2025: The Foundation

- Milestone: Launch BPI India on August 15th.
 - Action: Deploy the official website, featuring the finalized charter and the interactive presentation deck.
 - Action: Activate social media channels (Twitter/X, LinkedIn) with a coordinated announcement from all founding members.
 - Action: Publish the initial set of "founding op-eds" on various platforms, establishing your core arguments on day one.
 - Action: Announce the "Pledge and Prepare" fundraising campaign, detailing the options for fiscal sponsorship, the Bitcoin multisig "Genesis Fund," and formal pledges.

September 2025: Pillar 1 - The Sovereign Mining Initiative

- **Goal:** Establish BPI India as the primary thought leader on sovereign Bitcoin mining in the Indian context.
- Milestone: Publish the "State-Level Mining Playbook: An Assam Case Study"
 White Paper.
 - Action: This will be your first major research output. The paper will detail how Assam can leverage its hydroelectric power to create a state-level strategic reserve, using Bhutan as a direct, successful analogy.
 - Action: Focus on the economic benefits: turning stranded energy into a
 productive asset, creating high-tech jobs, and building a sovereign wealth fund
 independent of the central government's balance sheet.
 - Action: Begin targeted distribution of the paper to energy and policy journalists in the Northeast and directly to relevant offices within the Assam state government.

October 2025: Pillar 2 - Policy & Advocacy

- **Goal:** Transition from public advocacy to direct, constructive engagement with the policy-making ecosystem.
- Milestone: Secure and conduct the first "Educational Briefing" with a relevant government office.
 - Action: Identify and target a specific, receptive audience—this could be a tech-forward Member of Parliament, a key advisor in the Ministry of Finance, or a director at MeitY (Ministry of Electronics and Information Technology).
 - Action: The briefing's topic will be non-confrontational and educational, such as "Understanding Proof-of-Work: A Framework for Energy & National Security." The goal is to establish BPI India as a credible, data-driven resource,

- not a lobbyist.
- Action: In parallel, formally engage a law firm to begin the Section 8
 (non-profit) company incorporation process. This is a critical background task that needs to be initiated now.

November 2025: Pillar 3 - The Strategic Reserve Initiative

- Goal: Introduce the concept of Bitcoin as a treasury asset to the Indian corporate sector.
- Milestone: Host the inaugural BPI India Webinar: "The CFO's Playbook for a Bitcoin Treasury."
 - Action: Assemble a high-impact panel featuring a founding member, an international expert with corporate treasury experience, and a respected Indian financial professional from your advisory circle.
 - Action: Target the webinar at an audience of CFOs, corporate treasurers, and family office managers in India.
 - Action: The content will be practical, covering the rationale for hedging against rupee devaluation, custody solutions, and the accounting/legal considerations for Indian companies. The recording and a summary guide will become a permanent asset on your website.

December 2025: Consolidation & Looking Ahead

- **Goal:** Solidify the year's progress and build a transparent foundation for future growth.
- Milestone: Publish the "BPI India: 2025 Genesis Report & 2026 Roadmap."
 - Action: This public report will serve as a transparency statement for all early donors and supporters. It will detail the milestones achieved: the launch, the white paper, the policy briefing, and the webinar.
 - Action: The report will officially announce the roadmap for 2026, which will include the formal launch of Pillar IV (Education) and Pillar V (Commerce & Payments), giving supporters a clear view of what's next.
 - Action: Use this report as the centerpiece for an end-of-year fundraising and community-building drive.

A Declaration of Intent: Forging Our Future

Our work rests on four pillars: Advocacy, Education, Strategic Reserve, and Medium of Exchange. These are not independent initiatives; they are a unified, synergistic strategy. The

research from our advocacy will fuel our educational content. The grassroots support built by education will create the political mandate for a strategic reserve. The tangible utility demonstrated by our Medium of Exchange projects will make the case for adoption undeniable for every citizen and small business.

This charter is more than a document; it is a declaration of intent. The path of inaction, of allowing our nation to be shackled by a legacy financial system while the world moves forward, is a path of guaranteed decline. The alternative is a path of courage, foresight, and self-reliance. It is a path that embraces the most profound technological innovation for property rights that humanity has ever discovered.

We envision an India where a farmer's life savings are immune to inflation, where a software developer in Bengaluru can receive payment from a client in Boston instantly, with finality, and for a fraction of a penny, and where our nation's treasury is fortified by a truly global, neutral, and incorruptible asset. This future is not inevitable, but it is within our grasp. It demands rigorous work, unwavering focus, and a coalition of patriots who believe in a stronger, more prosperous India for the next generation. The time to build is now.

Join us.