GOVERNMENT OF ANDHRA PRADESH <u>ABSTRACT</u>

IT, E & C Department – Promotion Wing – Andhra Pradesh Quantum Computing Policy (2025-30) – Orders – Issued.

INFORMATION TECHNOLOGY, ELECTRONICS AND COMMUNICATION [IT, E & C] (PROMOTIONS) DEPARTMENT

G.O.MS.No.54 Date: 11.11.2025 Read the following.

- 1. G.O.Ms.No.10 IT, E&C (e-GOV) Department, Dated: 19.12.2024.
- 2. G.O.Rt.No.20 IT, E&C (TECH) Department, Dated: 18.03.2025.
- 3. G.O.Ms.No.17 IT, E&C (INFRA WING) Department, Dated: 30.05.2025.
- 4. G.O.Ms.No.19 IT, E&C (INFRA WING) Department, Dated: 08.06.2025.
- 5. G.O.Ms.No.23 IT, E&C (INFRA WING) Department, Dated: 07.07.2025.
- 6. G.O.Ms.No.25 IT, E&C (INFRA WING) Department, Dated: 13.07.2025.
- 7. G.O.Ms.No.35 IT, E&C (INFRA WING) Department, Dated: 07-09-2025.

ORDER:

The Government of Andhra Pradesh has launched the Amaravati Quantum Valley (AQV) Initiative, aimed at positioning Amaravati as a nucleus for quantum innovation. In the reference 1, the Government of Andhra Pradesh formed "Committee for Quantum Computing" for suggesting a "clear Roadmap to position Andhra Pradesh as a hub for Quantum Computing.

- 2. In the reference 2, the Government constituted "The Andhra Pradesh Quantum Computing Task Force Committee" with the goal of making the state a leader in quantum computing technology, which would impact deep technologies.
- 3. In the reference 3, the Government of Andhra Pradesh has signed Memoranda of Understanding (MoUs) with industry giants IBM, Tata Consultancy Services (TCS), and Larsen & Toubro (L&T) to establish India's inaugural "Quantum Valley Technological (or Tech) Park in Amaravati".
- 4. In the reference 4, the Government of Andhra Pradesh has established the Andhra Pradesh State Quantum Mission (APSQM). The mission is established so that it acts as the apex body for planning, coordination, and execution of quantum-related programs in the state. And, the mission will oversee the development of the Quantum Valley and guide the strategic integration of research, education, innovation, industry collaboration, infrastructure creation, and policy formulation.
- 5. In the reference 5, the Government of Andhra Pradesh successfully organized the Amaravati Quantum Valley Workshop on 30th June 2025 at Vijayawada. As a key outcome of the deliberations held during the workshop, the stakeholders collectively developed the "Amaravati Quantum Valley Declaration", a forward-looking document that encapsulates shared commitments, long-term vision, and

strategic priorities for quantum research, innovation, talent development, infrastructure creation, and international engagement.

- 6. In the reference 6, the Government of Andhra Pradesh has formed "Amaravati Quantum Computing Centre (AQCC)" under the Companies Act, 2013 as wholly owned Government company.
- 7. In the reference 7, the Government approved the constitution of two high-level committees, the Apex Committee, and the Expert Committee, to provide structured oversight, specialized expertise, and strategic direction to the State's quantum mission.
- 8. Quantum technologies offer transformative potential across defence, secure communications, healthcare, advanced manufacturing, and large-scale optimization. To accelerate their practical adoption, the Andhra Pradesh Quantum Computing Policy has been formulated. It aims to build an integrated ecosystem of shared infrastructure, industry partnerships, skill development, and standards aligned with the national mission.
- 9. The Government, after careful examination of the proposal, hereby accords the approval for the "Andhra Pradesh Quantum Computing Policy 2025-30" and is enclosed to this order as Annexure.
- 10. This Policy shall be valid for a period of 5 years from the date of the policy notification, or till a new Policy is announced, whichever is later.
- 11. The Incentives mentioned in the policy will be extended to eligible companies/organizations as per the operational guidelines to be notified separately. The IT, E&C Department shall take necessary action for implementing the operating guidelines for this Policy.
- 12. This order is issued with the remarks and concurrence of the Finance department through the file number Fin. U.O.No.FIN01-FMU0MISC/557/2025-FMU.GAD.I

(BY ORDER AND IN THE NAME OF THE GOVERNOR OF ANDHRA PRADESH)

BHASKAR KATAMNENI SECRETARY TO GOVERNMENT

To:

The Secretary, Department of Science & Technology, GoI

The Secretary, Ministry of Electronics & Information Technology (MeitY), GoI

The Mission Director, National Quantum Mission

The Director, IIT Madras

The Director, IIT Tirupati

The Director, IISc Bangalore

The Director, IIT Bombay

The Director, IIT Delhi

The members of Apex Committee, State Quantum Mission – Andhra Pradesh

The members of Expert Committee, State Quantum Mission – Andhra Pradesh

The Board of Directors of Amaravati Quantum Computing Centre (AQCC)

M/s. TCS Limited

M/s. IBM

M/s. L&T Limited

The APCRDA, Amaravati

The Spl. Chief Secretary to Government, Revenue (CT) Department

The Secretary to Govt., Industries and Commerce Dept.

The VC&MD, APIIC Ltd, Vijayawada

The Principal Secretary to Government, Finance Department

The Principal Secretary to Government, Energy, I&I Department

The Director, Industries, Andhra Pradesh

The CEO, Andhra Pradesh Economic Development Board

The MD, APTS, Vijayawada

Copy to:

The OSD to Hon'ble Minister for Information Technology, Andhra Pradesh

The PS to Principal Secretary to Hon'ble Chief Minister

The LET & F (Employment) Department.

The Law (B) Department

The P.S. to Secretary to Government & CIP

The P.S. to Secretary/Special Secretary to Government, IT, E&C Department SC/SF

// FORWARDED: BY ORDER //

SECTION OFFICER

Annexure to G.O.Ms.No.54, dt: 11.11.2025

ANNEXURE



Andhra Pradesh

Quantum Computing Policy 2025-30

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1. Preamble

The Government of Andhra Pradesh recognizes the transformative potential of Quantum Computing and its strategic importance to national competitiveness and technological sovereignty. This policy has been formulated in alignment with the Government of India's National Quantum Mission (NQM) and builds upon Andhra Pradesh's pioneering initiatives, including the establishment of the Amaravati Quantum Valley, Amaravati Quantum Computing Centre (AQCC), and State Quantum Mission Committees. It seeks to consolidate the State's efforts to position Amaravati as India's Quantum Gateway and a globally recognized hub for research, innovation, and applications in this frontier domain.

2. Introduction to Quantum Computing Technology

Quantum Computing is based on quantum bits (qubits) which leverage principles such as superposition, entanglement, and quantum interference to process information in ways that classical computers cannot. Unlike binary bits, qubits can exist in multiple states simultaneously, enabling parallel computations. Quantum algorithms such as Shor's algorithm and Grover's algorithm demonstrate exponential speedups for factoring and search problems, underscoring the disruptive capability of this technology. Currently, quantum systems are in the Noisy Intermediate-Scale Quantum (NISQ) stage, requiring significant advancements in error correction and scalable architectures. Nevertheless, their potential applications in drug discovery, material science, optimization, and cryptography are already being demonstrated.

3. Global Quantum Technology Landscape

The strategic significance of quantum technologies has been acknowledged globally, with over 30 countries collectively committing more than USD 40 billion in public investments. China leads with USD 15 billion, followed by the European Union at USD 10 billion, largely driven by Germany. The United States ranks third, having allocated approximately USD 5 billion toward quantum research, infrastructure, and commercialization. Leading companies such as IBM, Google, Microsoft, and PsiQuantum are advancing diverse qubit architectures, including superconducting circuits, trapped ions, photonics, and neutral atoms. International policy frameworks emphasize security, standards, and workforce development to ensure leadership in this critical domain.

Quantum technologies are receiving accelerating global attention, with governments and industry committing large-scale funding and roadmaps to translate research into commercial capability. Analyses cited during the Amaravati workshops highlight rapid investment growth and expanding enterprise

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¹ ECI 25 PolicyBrief 06-2025 LY03.pdf

engagement — with industry reports and strategic consultancies documenting multi-billion dollar flows into quantum R&D and deployments, and leading technology firms publishing concrete scaling roadmaps.

The following strategic application areas exemplify quantum computing's near-term utility and long-term strategic value:

- a. **Cryptography & Cybersecurity:** QKD (Quantum Key Distribution) and post-quantum cryptography are redefining secure communication. While NIST and NSA are standardizing PQC, pilots in QKD are underway in the U.S., EU, and China.²
- b. **Al & Machine Learning:** Quantum algorithms such as VQE and QAOA enable accelerated optimization and clustering. IBM, TCS and US NREL are advancing hybrid Al–quantum solutions for energy and industry.³
- c. **Healthcare & Pharma:** Collaborations like IBM-Moderna have simulated RNA folding using 80 qubits of an IBM Quantum Heron chip, aiding vaccine design. Startups like BosonQ Psi in India are applying quantum chemistry to pharma R&D.⁴
- d. **Materials Science:** Quantum simulations are driving advances in superconductors, catalysts, and batteries. Mercedes-Benz and IBM are collaborating to simulate multitudes of molecular properties and battery chemistry behaviors on quantum systems.⁵
- e. **Energy & Climate:** Quantum processors are being linked with grid simulators for renewable optimization (U.S. NREL). Quantinuum demonstrated CO₂ capture modeling with quantum chemistry.⁶
- f. **Sensing & Metrology:** Atomic clocks, quantum gravimeters, magnetometers, and NV-diamond sensors are reaching commercial maturity, with applications in GPS, defense, and healthcare.⁷

² Quantum Key Distribution Meets Post-Quantum Cryptography - IEEE Spectrum;

³ IBM, Tata Consultancy Services and Government of Andhra Pradesh Unveil Plans to Deploy India's Largest Quantum Computer in the Country's First Quantum Valley Tech Park;

⁴ Moderna and IBM use quantum computing to model mRNA | IBM Quantum Computing Blog

⁵ Daimler | IBM

⁶ Quantum Computers Can Now Interface With Power Grid Equipment | NREL

⁷ Quantum Sensors for Positioning, Navigation, and Timing (PNT); New Diamond Magnetometer Paves the Way for GPS-Free Navigation

3.1. Global Initiatives in Quantum Computing:

To realize these applications at scale, national programs and international partnerships are aligning investment, standards, and infrastructure. The following national initiatives exemplify major government commitments that underpin global quantum development.

- **a. United States:** National Quantum Initiative (2018): coordinates multi-agency research and centers, substantial federal funding, and national labs support quantum R&D.⁸
- **b.** European Union: Quantum Flagship: a decade-long program (EUR 1 billion) supporting research to commercialization in computing, communication, and sensing.⁹
- **c.** China: National Laboratory for Quantum Information Sciences (Hefei): one of the largest State-led investments in quantum infrastructure (~USD 1 billion).¹⁰
- d. **Other Hubs**: Japan¹¹, South Korea, Germany¹², and France¹³ are deploying advanced quantum systems (e.g., IBM System One/Two) at universities, datacenters and HPC facilities, forming a distributed network of global quantum testbeds.

4. Importance of Quantum Computing for India's Digital & Industrial Future

Quantum computing is recognized as a transformative strategic technology for India. It will be crucial for national security, digital sovereignty, and industrial competitiveness. Quantum technologies have applications in defense, secure communications, healthcare, pharmaceuticals, logistics optimization, finance, and clean energy. These benefits align with national priorities including Digital India, Make in India, Startup India, and Aatmanirbhar Bharat. States like Andhra Pradesh are complementing this vision by creating Quantum Valley in Amaravati, positioning India as a leader in the global quantum race.

5. Indian Quantum Ecosystem

The Government of India has taken proactive steps to build a robust quantum ecosystem. In 2020, the National Mission on Quantum Technology and Scientific Applications was announced¹⁴. In April 2023,

⁹ Quantum Technologies Flagship | Shaping Europe's digital future

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⁸ PUBL368.PS

¹⁰ China's long view on quantum tech has the US and EU playing catch-up | Merics

¹¹ Pursuing the 100,000-Qubit Quantum Computer Through Japan-U.S. Collaboration | The Government of Japan - JapanGov

¹² Yonsei Deploys First IBM Quantum System One in the Republic of Korea

¹³ La Stratégie Nationale Quantique - Portail de la stratégie nationale quantique

¹⁴ Press Release: Press Information Bureau

the Union Cabinet approved the National Quantum Mission (NQM) with an outlay of INR 6,003.65 crore for the period 2023–24 to 2030–31.¹⁵ MeitY has also established the Quantum Computing Applications Lab (QCAL) with AWS to provide cloud-based quantum computing access to researchers and government agencies.¹⁶

5.1. National Quantum Mission (NQM) ¹⁷:

The NQM aims to seed and scale quantum research across computing, communication, sensing, and materials. Objectives include:

- a. Develop intermediate-scale quantum computers: 20–50 qubits in 3 years. 50-100 qubits in 5 years; up to 1,000 qubits in 8 years.
- b. Establish secure quantum communication links: satellite based QKD over 2,000 km and inter-city fiber QKD networks.
- c. Build quantum networks with entanglement swapping and repeaters.
- d. Develop quantum sensors such as atomic magnetometers, gravimeters, gyroscopes, and high-precision atomic clocks.
- e. Create advanced quantum materials and devices for computing and communication.

Thematic Hubs (T-Hubs) have been set up at IISc Bangalore, IIT Madras (with C-DOT), IIT Delhi and IIT Bombay, spanning 14 groups across 17 states. These hubs lead national-level activities in R&D, training, entrepreneurship, and international collaboration.

5.2. Initiatives Under the National Quantum Mission

NQM supports a wide range of projects, including:

- a. Defence Research and Development Organization (DRDO): secure communication and quantum cryptography projects.
- b. Society for Electronic Transactions and Security (SETS): post-quantum cryptography research.

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¹⁵ Press Release:Press Information Bureau

¹⁶ The MeitY Quantum Computing Applications Lab - Digital India | Leading the transformation in India for ease of living and digital economy | MeitY, Government of India

¹⁷ Press Release:Press Information Bureau

- c. Centre for Development of Telematics (C-DOT): fiber-based QKD and quantum-secure communication devices.
- d. Dedicated innovation and incubation programs supporting startups and academic projects in quantum computing.

5.3. Quantum Computing Market in India:

India's quantum computing market is valued at approximately USD 1 billion in 2024 and is projected to reach nearly USD 7 billion by 2032, growing at over 27% CAGR¹⁸. Major application areas include materials science, pharmaceuticals, financial modeling, cryptography, manufacturing, agriculture, and aerospace. Global players such as IBM, TCS and AWS are actively collaborating in India. Quantum-as-a-Service (QaaS) platforms are emerging as a key opportunity, allowing broad developer access without heavy capital investment in hardware. Amaravati's vision of Quantum Valley builds on this global momentum, positioning Andhra Pradesh alongside these global quantum hubs.

6. Quantum Computing Ecosystem in Andhra Pradesh

The Government of Andhra Pradesh's visionary ambition to position the state as a global hub for innovative technologies led to the genesis of the Andhra Pradesh Quantum Valley as a transformative, future-ready initiative. Anchored in quantum computing, the Andhra Pradesh Quantum Valley aims to create a differentiated competitive advantage and leapfrog into the next frontier of technological leadership. This ecosystem-driven approach aligns seamlessly with India's National Quantum Mission, reinforcing the state's commitment to driving research, innovation, and real-world applications in quantum technologies.

In line with the National Quantum Mission (NQM), Andhra Pradesh has taken a pioneering step by establishing the State Quantum Mission (SQM) as the nodal institution to drive the next frontier of technological innovation in the State. Under the SQM, the Amaravati Quantum Valley Mission Board shall be constituted, with multiple sector-specific Working Groups mandated to identify, evaluate, and develop use-cases of quantum technologies across priority domains. The Amaravati Quantum Valley Mission Board shall also ensure transparency by publishing a dashboard of Key Performance Indicators (KPIs) on a quarterly basis.

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¹⁸ India Information Technology Quantum Computing Market

The Government of Andhra Pradesh has constituted the Andhra Pradesh Quantum Computing Task Force Committee¹⁹ with the mandate to position the State as a leader in quantum computing and related deep technologies. The Committee has been entrusted with the objectives of establishing a Quantum Valley in Amaravati, setting up a Quantum Computing–driven Deep Technologies Research Park, and attracting global investments and industry collaborations in quantum computing research.

The jewel of the State's quantum initiative is the establishment of the Amaravati Quantum Computing Centre (AQCC)²⁰, conceived as the anchor institution of the proposed Quantum Valley at Amaravati. The AQCC shall serve as the nucleus for positioning Andhra Pradesh as a global hub in the domain of quantum technologies, harnessing the transformative potential of quantum computing, quantum materials, and allied emerging technologies for socioeconomic development, scientific advancement, and industrial leadership.

In pursuance of the State Quantum Mission (SQM)²¹, the Government accorded approval for the constitution of two high-level committees, namely the Apex Committee and the Expert Committee²², to provide structured oversight, specialized expertise, and strategic direction to the State's quantum mission, with the Apex Committee providing strategic guidance and policy direction to position Andhra Pradesh as a global leader in quantum technologies, while the Expert Committee offers technical oversight, operational guidance, and recommendations to implement and scale quantum initiatives effectively.

To further strengthen the ecosystem, the Government has entered into strategic MoUs with organizations specializing in the field of quantum computing.

The Government of Andhra Pradesh has already made significant strides in positioning the state at the forefront of quantum technologies, laying the groundwork through policy support, infrastructure development, and strategic partnerships with leading academic and research institutions. The Amaravati Quantum Computing Centre (AQCC) is envisioned as the cornerstone of this initiative, serving as the anchor around which a vibrant ecosystem of research, innovation, industry collaboration, and talent development will flourish. By bringing together academia, startups, and established enterprises, the

¹⁹ G.O.Rt.No.20 INFORMATION TECHNOLOGY, ELECTRONICS & COMMUNICATIONS [ITE&C] (TECH) DEPARTMENT Dated: 18-03-2025

²⁰ G.O.Ms.No.25 INFORMATION TECHNOLOGY, ELECTRONICS & COMMUNICATIONS (INFRA WING) DEPARTMENT Dated: 13-07-2025

²¹ G.O.Ms.No.19 INFORMATION TECHNOLOGY, ELECTRONICS & COMMUNICATIONS (INFRA WING) DEPARTMENT Dated: 08-06-2025

²² G.O.Ms.No.35 INFORMATION TECHNOLOGY, ELECTRONICS & COMMUNICATIONS (INFRA WING) DEPARTMENT Dated: 07-09-2025

AQCC will not only accelerate advancements in quantum computing and related technologies but also catalyze economic growth, create high-value employment, and establish Andhra Pradesh as a global hub for next-generation technological leadership. By 2035, Amaravati aims to be not only India's quantum capital but also the world's lighthouse for deep technological progress.

7. Policy Objectives and Targets

7.1. Strategic Objectives of the Policy²³:

- a. Living-Lab Infrastructure: AQV will create India's largest open quantum testbed, QChipIN, enabling pilots and end-to-end access to quantum hardware, tools, and expertise across multiple sectors.
- b. Indigenous Supply-Chain Acceleration: AQV will drive domestic production of quantum hardware and components while promoting a robust and self-reliant supply chain.
- c. Talent & Capacity Building: AQV will establish an integrated quantum skilling ecosystem to train specialists, empower universities, and scale quantum education and research across India.
- d. Startup & Investment Catalyst: AQV will foster quantum startups through funding, mentorship, regulatory support, and infrastructure access, while attracting significant investments in the sector.
- e. Global Collaboration & Standards Leadership: AQV will host a Global Quantum Collaboration Council to harmonize standards, enable joint R&D, and strengthen trusted international quantum networks.

7.2. Key Targets:

- a. Deploy three quantum computers based on distinct qubit technologies (chosen from Superconducting Circuits, Trapped Ions, Photonic Qubits, Neutral Atoms, or Topological Qubitsby).
- b. Achieve a total effective quantum capacity of 3,000 qubits.

²³ G.O.Ms.No.23 INFORMATION TECHNOLOGY, ELECTRONICS & COMMUNICATIONS (INFRA WING) DEPARTMENT Dated: 07-07-2025

- c. Establish domestic production of qubit platforms, cryo-electronics, photonic packages, and quantum readout hardware targeting INR 5,000 crore in annual exports by 2030.
- d. Empower at least 20 universities in Andhra Pradesh to run undergraduate, postgraduate, and PhD programs in Quantum Technology and upskill 5,000 specialists in subjects related to quantum technology and its applications.
- e. Support at least 100 Quantum hardware and applications startups through the Quantum Fund and Living lab Infrastructure.
- f. Attract a USD 1 Billion in quantum technology investments covering areas such as computing, chips, sensing, and communications.

8. Need for the Policy

Quantum technologies offer transformative benefits across defence, secure communications, healthcare, advanced manufacturing, and large-scale optimization, with clear implications for national competitiveness and public service delivery. A dedicated State policy will accelerate the translation of scientific advances into practical outcomes by creating an integrated ecosystem of shared infrastructure, industry partnerships, skills development and standards aligned with the national mission.

Andhra Pradesh is well placed to lead this endeavor. The State has launched the Amaravati Quantum Valley initiative and constituted the Amaravati Quantum Computing Centre as a government company and has entered into strategic agreements with global and national partners including major technology firms and engineering groups to anchor a quantum technology park. Planned land and infrastructure commitments, together with an expert state mission and proposed shared facilities such as cryogenic bays and optics laboratories, provide a strong foundation for testbeds, industry co-development and workforce training. These elements will lower barriers to entry for startups and researchers, enable demand-led proofs of concept, and attract private investment.

By establishing a clear policy framework, Andhra Pradesh will create favorable conditions for innovation, quality jobs and technology adoption in the state—while ensuring that national objectives are realized locally through practical pilots in healthcare, energy, secure communications, and other priority sectors.

9. Policy Period

9.1. This Policy shall be valid for a period of 5 years from the date of the policy notification, or till a new Policy is announced.

- 9.2. The policy may be amended and modified during implementation; however, all such amendments and modifications shall be applied prospectively and shall not curtail any benefit or concession already granted under the policy.
- 9.3. The Government of Andhra Pradesh may extend the period of this policy as and when required.

10. International Collaboration

- 10.1. The Government of Andhra Pradesh, guided by recommendations from the SQM Expert Committee, will actively pursue technical collaborations with leading Quantum R&D institutions and private sector innovators.
- 10.2. These partnerships aim to explore joint research programs and optimize the use of existing infrastructure for Quantum technology development. By leveraging the expertise and facilities of top-tier national and international entities, the state seeks to accelerate advancements in Quantum Computing and related fields.
- 10.3. This strategic approach will foster innovation, enhance technical capabilities, and position Andhra Pradesh as a key contributor to India's Quantum ecosystem.

11. Infrastructure Development for Enabling Quantum Ecosystem

11.1. Quantum Valley Tower

As part of its strategic vision to position Andhra Pradesh as a frontrunner in Quantum computing and applications, the Government of Andhra Pradesh proposes the development of the Quantum Valley Towers—a state-of-the-art, technology-centric commercial infrastructure dedicated to quantum computing and allied applications. Spanning a built-up area of 90 Lakh sq.ft. with a seating capacity of 80,000, this iconic facility will serve as a nucleus for innovation, housing global quantum technology firms, high-growth startups, and academic spin-offs.

The state will ensure access to the Quantum Valley Towers to the stakeholders at reduced rental rates, thereby lowering entry barriers and catalyzing ecosystem development. By enabling access to plug-and-play infrastructure, the initiative aims to accelerate commercialization of quantum technologies, foster cross-sectoral collaboration, and attract marquee investments. This flagship project will not only enhance the state's competitiveness

in emerging tech but also reinforce its commitment to building a knowledge-driven economy. The Towers are envisioned as a high-impact enabler for talent retention, IP creation, and scalable quantum solutions.

11.2. Quantum Hardware Park

To catalyze the growth of a robust quantum manufacturing ecosystem, the Government of Andhra Pradesh will establish a dedicated Quantum Hardware Park — a next-generation industrial cluster tailored for quantum hardware and component manufacturers. Strategically designed with ready-to-occupy industrial land parcels, the park will offer 24x7 utility support, including uninterrupted power, water, and high-speed connectivity, alongside state-of-the-art common facilities to enable rapid scale-up and operational efficiency.

Eligible enterprises will be allotted industrial land at highly subsidized rates, thereby fostering capital-efficient entry and expansion. This initiative is poised to unlock value across the quantum supply chain, from chip fabrication to quantum sensors and cryogenic systems, positioning Andhra Pradesh as a preferred destination for Quantum hardware & Components manufacturing. The park will serve as a manufacturing accelerator, driving innovation, enhancing supply-side capabilities, and attracting strategic investments. By integrating infrastructure with policy incentives, the Quantum Hardware Park will play a pivotal role in transforming the state into a quantum manufacturing hub, aligned with national priorities and global benchmarks.

12. Skill Development

- 12.1. The Government of Andhra Pradesh, through APSSDC, aims to build a robust skilled workforce in emerging technologies like Quantum Computing.
- 12.2. By promoting recognized Quantum skilling programs, the state will empower individuals to gain expertise in Quantum hardware, software, and applications.
- 12.3. Strategic collaborations with leading national and international research institutions, as recommended by the Expert Committee, will ensure access to cutting-edge curriculum and training methodologies.
- 12.4. This initiative will position Andhra Pradesh as a hub for Quantum talent, fostering innovation and readiness for future technological advancements across industries.

13. Financial Incentives for Startups

#	Category	Incentive
1	Startup Grants	 To convert innovative ideas into test solution or proof of concept Grant up to INR 30 Lakhs for startups, in a phase wise manner, based on existing phase of that startup is in and performance at previous stage, until product viability is reached. This grant will be capped to total of INR 30 Lakhs in total to one startup. In lieu of above incentive, startups can also receive a matching (1:1) grant in proportion to the grant they receive under Gol (National Quantum Mission). The eligibility and the maximum grant amount will be recommended by the EC-SQM (Expert Committee – State Quantum Mission)
2	Seed funding with Equity	Up to INR 1 Crore, based on equity sharing model.
3	Go to market support	Up to INR 5 Crore, based on equity sharing model.
4	Support for attending events/ Fairs etc.	75% Re-imbursement up to INR 10 Lakh for events / exhibitions (for one international & 2 Domestic events). Only once per startup.
5	Accelerator program support	75% of cost, up to INR 4 Lakhs per program, incurred towards registration, travel, lodging and boarding expenses. Maximum of 2 programs per startup.
6	Patent filing cost	75% Re-imbursement on patent expenses, up to INR 4 Lakh (domestic patent) & INR 20 Lakh (International patent)
7	Rental Subsidy	100% Rental subsidy for workstations in *Notified Area for up to 20 employees.
8	Deployment of solutions in Government Programs	The EC-SQM shall identify high-priority challenges across industrial and social sectors and facilitate additional customized funding support for startups and academic research institutions in coordination with the Government departments. This support will enable the development of pilot
	Programs	Government departments. This support will enable the development of p

#	Category	Incentive
		Proof-of-Concepts (PoCs) aligned with Government-led initiatives.
		Note: All project proposals will be evaluated by the EC-SQM, and its
		recommendations shall be submitted to the Government for final approval.
9	Access to Quantum	Subsidized or Free Access to AQCC for Testing & Development, on a case-
	Computing Facility	to-case basis
10	Eligibility Criteria for	Start-up's incubated anywhere, with operations out of Amaravati quantum
	Startup	valley will be eligible for this incentive

14. Financial Incentives for Academic Projects

#	Category	Incentive
1	Academic Grants	 To convert innovative ideas into test solution or proof of concept Grant up to INR 30 Lakhs for Academic projects, in a phase wise manner, based on existing phase of that project/concept is in and performance at previous stage, until product viability/IP is reached. This grant will be capped to total of INR 30 Lakhs in total to one academic project. In lieu of above incentive, the academic project can also receive a matching (1:1) grant in proportion to the grant they receive under Gol (National Quantum Mission). The eligibility and the maximum grant amount will be recommended by the EC-SQM (Expert Committee – State Quantum Mission)
2	Accelerator program support	75% of cost, up to INR 4 Lakhs per program, incurred towards registration, travel, lodging and boarding expenses. Maximum of 2 programs per Academic team.
3	Patent filing cost	75% Re-imbursement on patent expenses, up to INR 4 Lakh (domestic patent) & INR 20 Lakh (International patent)
4	Rental Subsidy	100% Rental subsidy for workstations in *Notified Area for up to 50 employees.

#	Category	Incentive
5	Deployment of solutions in Government Programs	The EC-SQM shall identify high-priority challenges across industrial and social sectors and facilitate additional customized funding support for startups and academic research institutions in coordination with the Government departments. This support will enable the development of pilot Proof-of-Concepts (PoCs) aligned with Government-led initiatives. Note: All project proposals will be evaluated by the EC-SQM, and its recommendations shall be submitted to the Government for final approval.
6	Access to Quantum Computing Facility	Subsidized or Free Access to AQCC for Testing & Development, on a case-to-case basis
7	Eligibility Criteria for	Academicians can collaborate with any university in India/ abroad provided they co-collaborate with AP universities/ institutes will be eligible for these incentives

15. Financial Incentives For Hardware & Component Manufacturers

- 15.1. Capital Subsidy: (For Hardware & Components Manufacturers including peripherals, optomechanical devices, cables etc. utilized in Quantum Computing hardware or applications):
 - a. **For Early Bird Investors** (First 10 approved projects): 50% Capital Subsidy in 2 equal installments over 2 years for Projects with investment < INR 50 Cr.
 - b. **For others:** 30% Capital Subsidy in 5 equal installments over 5 years for Projects with investment < INR 50 Cr.
- 15.2. Land Incentive: Discount on cost of land in Quantum Hardware Parks on a case-to-case basis
- 15.3. Power Subsidy: Reimbursement of INR 1/Unit for 5 years from date of commercial production
- 15.4. Stamp Duty Subsidy: 100% Re-imbursement
- 15.5. SGST Subsidy: 100% Reimbursement of Net SGST accrued to the state for 5 years from date of commercial production.
- 15.6. The cumulative incentive granted to any firm by GoAP will be capped at 50% of the investment made by the firm in the state.
- 15.7. Tailor made incentives and concessions for Mega projects
 - a. Projects with a proposed investment of more than INR 50 Crores, are classified as Mega projects. These projects will be eligible for tailor made incentives.

b. Project proposal shall be reviewed by EC-SQM before the same can be put up to SIPC and SIPB for approval.

16. Incentives for firms developing Quantum Computing Applications

#	Category	Incentive
1	Minimum eligibility criteria	Firm with greater than INR 10 Cr in revenue or raised more than INR 10 Cr in funding
2	Rental subsidy	75% Rental subsidy per workstation, up to INR 10,000 / seat, per month, in *Notified Area for 5 years
3	IT Hardware CAPEX Support	Reimbursement of 50% of capex, up to INR 10 Cr., towards purchase of IT Hardware
4	Early Bird Import Subsidy	50% Reimbursement of Import duty on Quantum hardware for first 20 approved projects
5	Talent Acquisition Support	 50% CTC reimbursement subject to: Up to INR 6 Lakh per month for Highly Skilled resources & INR 1 lakh per month for local AP talent for 12 months. Subject to Min. 18-month employment duration per candidate
6	Power subsidy	Power Incentive: Industrial tariff will be applicable and discount of INR 1/unit for 5 years
7	Access to Quantum Computing Facility at AQCC	Subsidized / Nominal charges for utilizing AQCC resources including HPC facility for select companies developing and deploying algorithms for various potential use cases. Note: Application to be scrutinized by Expert Committee under SQM. Access to HPC facility will be granted as and when such as facility is established

		For firms creating more than 100 employment, tailor made
8	Tailor made incentives	incentive package shall be offered, post evaluation of the application
		by EC-SQM

17. Incentives for firms deploying High Performance Computing and manufacturing hardware for same.

Government to enable creation of HPC facility under AQCC on PPP mode and also develop production of such facilities in the hardware park.

#	Category	Incentive
1	High Performance Computing (HPC)	Up to 4 such facilities / projects will be supported under the policy.
2	Capital Subsidy	Reimbursement of 50% capital subsidy towards purchase of IT Hardware
3	Land Incentive	Discount on Land Cost in Quantum Hardware Park on case-to-case basis
4	Power Subsidy	Reimbursement of INR 1 per unit under notified area
5	Tailor Made Incentives	Upon review and approval of Expert Committee and approval by SIPC

18. Policy Implementation Framework

18.1. The policy will be monitored and implemented under the guidance of Apex committee and Expert Committee, as notified in G.O.MS.No.35 dated 7th September 2025.

- 18.2. The expert committee will review all the proposals submitted under this policy and provide recommendations to SIPC for consideration of startups, academic projects, IT firms and hardware and other component manufacturers for availing incentives under this policy.
- 18.3. The eligible firms will be requested to submit their action plan and deliverables for their product/service and the same will be deliberated while putting up the proposal for incentive approval.
- 18.4. The operating guidelines for this policy will be issued separately detailing the definitions of various terminologies and procedures for availing incentives under this policy.