Ministry of Economy and Finance

# Korea's AI Budget

## A Strategic Fiscal Investment for the Future

**Four-Pillar Investment Framework**

*A comprehensive 10.1 trillion won (in 2026) investment strategy for AI development*

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# Opening question

# Opening question : why does Korean government invest in AI?

## Is Active Industrial Policy Necessary?

- Market Failure vs Government Failure: Market inefficiencies due to information asymmetry, externalities, public goods issues
- Selecting Future Industries: Whether the government can accurately predict and select promising future industries
- Fair Competition Dilemma: The problem that government support may undermine a fair competitive environment
- The US, which previously rejected active industrial policies, is now implementing the strongest and most direct industrial policies.

## To What Extent Should Government Finances Intervene?

- Fiscal Soundness Issues: Excessive fiscal spending increases national debt, burdens future generations, and creates potential inflationary pressures
- Scope of Role: Should it be limited to complementing areas of market failure, such as supporting basic R&D and expanding social infrastructure?
- Should more active intervention, such as direct funding and subsidies for specific companies or industries, be allowed?
- While there is no definitive answer, deficit financing is more convincing when it promotes growth.

# Vision & Total budget to AI

# Korea's AI Fiscal Investment Vision

## Korea's AI Vision

**Korea is positioning itself to become a global AI leader through a comprehensive fiscal investment strategy of 10.1 trillion won (in 2026).**

- Foster domestic AI technology sovereignty and reduce dependence on foreign technologies
- Transform key industries through comprehensive AI integration and applications
- Establish world-class AI talent pipeline from education to professional development
- Position Korea as an international AI standards leader and innovation hub

## Strategic Approach

**Korea's AI fiscal investment is structured around four key pillars designed to create a comprehensive AI ecosystem:**

**AI Infrastructure & Data**
5.4 trillion won

**AI Talent Development**
1.4 trillion won

**Industry-wide AX**
2.6 trillion won

**Financial Support**
0.7 trillion won

## Global AI Competition Context

**Korea's investment comes amid accelerating global AI competition:**

| USA | China | EU |
|---|---|---|
| National AI Initiative | Next Generation AI Plan | AI Act & Investment |

*Korea's strategic fiscal investment positions the country to compete effectively with global AI leaders while developing unique national strengths.*

**Korea's ambitious 10.1 trillion won AI fiscal investment strategy represents a comprehensive national commitment to becoming a global AI leader**

# Strategic Implications of Korea's AI Fiscal Budget

**Korea's AI budget reflects a comprehensive strategy beyond technological development to include industrial transformation and social problem-solving**

### Technology Development
Investment in R&D for AI technology leadership

### Industrial Transformation
AX projects across sectors to boost productivity

### Social Problem-Solving
AI applications for public services and citizen needs

## Strategic Breadth

- Government support spans from R&D to infrastructure to talent development
- Investment shows **80% increase** from 2025 to 2026 budget
- Positions Korea as a **global AI leader** in competitive landscape

## Strategic Integration

- AI technologies integrated into **public services** for citizen benefits
- Balance between **government-led** and **market-driven** approaches
- Focus on **ethical and safe AI** development with safety and security measures

**Korea's AI budget demonstrates a holistic approach to AI development that seeks to balance technological advancement, economic competitiveness, and social welfare**

# Establishing the AI Budget Concept

## New AI Budget Concept

The AI budget represents a**distinct new approach**separate from traditional international financial classification systems (10-category or 12-category).

AI-related projects span across multiple traditional financial sectors, making it difficult to accurately identify AI investments using existing classification systems alone.

## Supplementary : Traditional Classifications

**10-category classification:**

General public services, Defense, Public order & safety, Economic affairs, Environmental protection, Housing, Health, Recreation & culture, Education, Social protection

**12-category classification:**

Adds Infrastructure development and Research & innovation to the 10 categories

## Core Components of the AI Budget

### AI Models

All projects related to the development, training, optimization, and deployment of AI models

Ex: LLM development, AI algorithm research, model fine-tuning

### AI Semiconductors

Design, production, and supply of specialized semiconductors supporting efficient AI model computation

Ex: GPUs, NPUs (Neural Processing Unit : Korea's AI semiconductor)

### AI Infrastructure

Computing resources, data storage, and transfer systems required for AI model training and operation

Ex: Cloud platforms (AWS, Google Cloud, Azure), data center construction and operation, data clustering

# Framework

# Budget Framework: Four Key Investment Pillars (2026)

**Korea's AI fiscal investment is structured around four strategic pillars designed to create a comprehensive AI ecosystem with a total budget of10.1 trillion won.**

## AI Infrastructure & Data

**5.4 trillion won**

53.5% of total budget

## AI Talent Development

**1.4 trillion won**

13.9% of total budget

## Industry-wide AX Transformation

**2.6 trillion won**

25.7% of total budget

## Financial Support on AI Industry

**0.7 trillion won**

6.9% of total budget

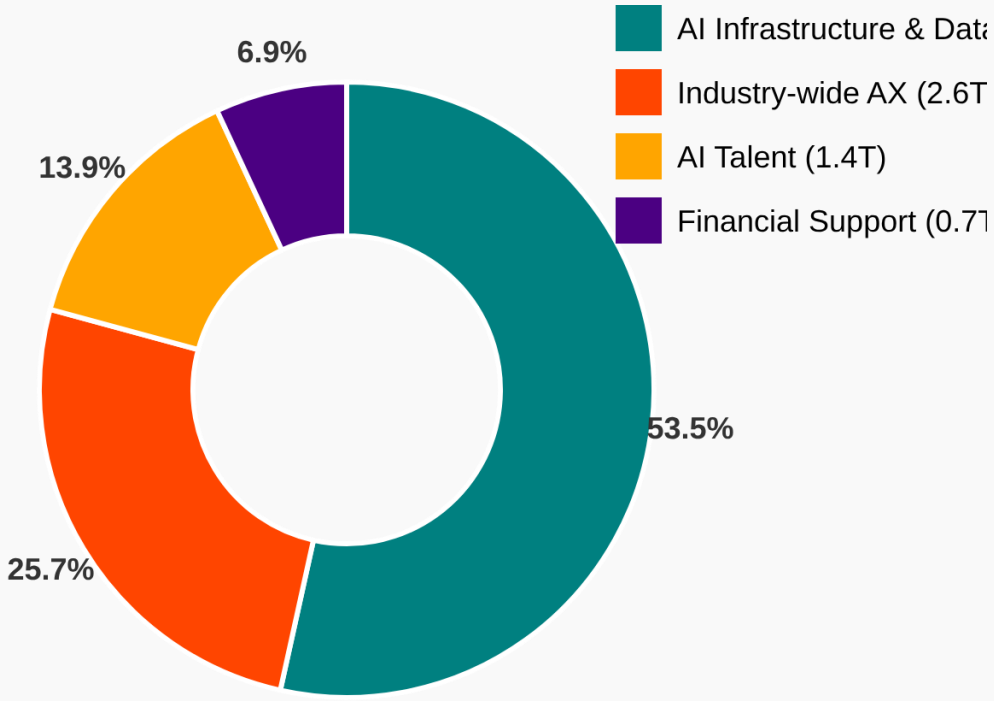
### Strategic Integration Approach

- Coordinated implementation across all government ministries and agencies
- Performance metrics and progress tracking for each pillar
- Adaptive strategy with annual review and adjustment mechanisms

These four investment pillars work together to create a self-reinforcing AI ecosystem that addresses all aspects of AI development, adoption, and growth

# Korea's AI Budget Overview (in 2026)

## Budget Allocation by Pillar




Total AI Budget: **10.1 trillion won**

## Budget Analysis

**53.5%** allocated to AI Infrastructure & Data (5.4 trillion won), reflecting the critical importance of foundational AI capabilities

**25.7%** directed to Industry-wide AX Transformation (2.6 trillion won) to ensure broad economic impact across sectors

**13.9%** invested in AI Talent Development (1.4 trillion won) to build human capital for sustainable AI growth

**6.9%** provided as Financial Support (0.7 trillion won) to catalyze private sector investment and innovation

Budget distribution reflects a**balanced approach**addressing both technical infrastructure and human/economic factors

Korea's 10.1 trillion won AI budget of 2026 represents a strategic investment focused primarily on building world-class infrastructure while ensuring balanced development across all aspects of the AI ecosystem

# Pillar 1 : Infrastructure & Data

# Pillar 1: AI Infrastructure & Data (5.4T won)

**Korea is investing 5.4 trillion won (53.5%) in AI infrastructure and data - the largest portion of the AI budget**

This reflects the critical importance of building robust foundations for AI development and deployment

## Computing Infrastructure

Development of world-class AI computing resources and processing capabilities

- Next-gen supercomputing facilities with specialized AI processors
- Edge computing networks for distributed AI processing
- Energy-efficient data centers with sustainable design

**2.3 trillion won**

## Data & Datasets

Creation and curation of comprehensive data assets for AI training

- Multi-modal AI training datasets for diverse applications
- Industry-specific data standards and integration frameworks
- Open data initiatives for research and development

**1.8 trillion won**

## AI Semiconductors

Development of domestic AI chip technology and hardware systems

- PIM (Processing-in-Memory) semiconductor technology
- Neuromorphic computing architecture research
- K-Cloud optimization for AI workloads

**1.3 trillion won**

## Computing Power Expansion

### Strategic Infrastructure Goals

Increase total AI computing capacity by 300% within 3 years to support advanced AI training

### Technological Independence

Develop domestic alternatives for critical AI infrastructure components to reduce foreign dependency

# AI Computing Infrastructure Projects 1 / 2

**Korea is investing in flagship computing infrastructure projects to establish world-class AI development capabilities with2.3 trillion wondedicated to computing systems alone.**

## National AI Computing Center

**800 billion won**

**Establishment of a centralized high-performance AI computing facility accessible to both public and private sectors**

- Deployment of over 10,000 high-performance GPUs and specialized AI processors
- Ultra-high-speed networking infrastructure with over 1 Tbps capacity
- Advanced security systems for sensitive data processing
- Research support and optimization assistance for AI developers

**Implementation period:** 2026-2028

## K-Cloud AI Infrastructure

**650 billion won**

**Development of a sovereign cloud computing platform optimized for AI applications**

- End-to-end security architecture for sensitive AI development
- Distributed architecture with regional data centers across Korea
- API-driven platform for seamless integration with existing systems
- Auto-scaling capabilities for demanding AI training workloads

**Implementation period:** 2026-2027

# AI Computing Infrastructure Projects 2 / 2

**These computing infrastructure projects will provide Korea with sovereign, sustainable AI processing capabilities necessary to compete in the global AI landscape.**

## AI Semiconductor Acceleration Program — 500 billion won

Development and deployment of domestic AI semiconductors for computing infrastructure

PIM (Processing-in-Memory) technology optimization for AI workloads

Manufacturing partnerships with domestic semiconductor firms

Software development kits for AI-optimized hardware

**Implementation period:** 2026-2029

## Green AI Data Centers — 350 billion won

Construction of energy-efficient data centers designed specifically for AI computing

Advanced cooling systems reducing energy consumption by 45%

Renewable energy integration with on-site generation

Heat recovery systems for community energy programs

AI-driven efficiency optimization for computing resources

**Implementation period:** 2026-2028

# AI Data Development Strategy

**Korea is investing 1.8 trillion won in comprehensive data development to create high-quality datasets for AI training and application development across multiple domains.**

## National Data Collections

Development of comprehensive, curated datasets to support diverse AI applications

- **Multi-modal AI Training Data**
  Text, image, audio, video datasets for general AI training
- **Korean Language Corpus**
  Comprehensive Korean text data for NLP model training
- **Public Sector Data Integration**
  Unified access to government datasets for AI applications

**700 billion won**

## Industry-Specific Data

Development of specialized data resources for priority economic sectors

- **Manufacturing Data Platform**
  Sensors, processes, and quality control datasets
- **Healthcare & Biomedical Data**
  Anonymized clinical and research datasets
- **Smart City Data Framework**
  Urban planning and infrastructure operation data

**650 billion won**

## Data Infrastructure

Development of technical systems to support data management and access

- **National Data Exchange**
  Secure platform for data sharing across organizations
- **Data Quality Framework**
  Standards and tools for data validation and quality assurance
- **Privacy-Preserving Technologies**
  Tools for anonymization and secure data processing

**450 billion won**

## Key Data Initiatives

### National Data Integration Platform

Centralized system connecting public and private data sources with standardized APIs and access controls

*Implementation: 2026-2027 | Budget: 250 billion won*

### Secure Data Sandbox Program

Protected environments for working with sensitive data while ensuring privacy and security compliance

*Implementation: 2026-2028 | Budget: 180 billion won*

# Pillar 2 : AI talent development

# Pillar 2: AI Talent Development (1.4T won)

**Korea is investing1.4 trillion won (13.9%)in AI talent development to build a world-class AI workforce**

This strategic investment aims to create a sustainable pipeline of AI professionals across education levels and domains

## Higher Education & Research

**650 billion won**

- Establish specialized AI graduate programs at top universities with international faculty
- Create AI research centers of excellence with state-of-the-art facilities
- Fund international research collaborations and exchange programs
- Establish PhD fellowships in priority AI research areas

**Key Target:**
Produce 5,000+ AI research specialists and PhDs by 2030

## K-12 & Undergraduate Education

**450 billion won**

- Integrate AI and computational thinking into K-12 curriculum nationwide
- Establish specialized AI high schools in major cities
- Expand undergraduate AI programs with industry-aligned curriculum
- Create AI competition programs and hackathons for students

**Key Target:**
100,000+ K-12 students with AI skills;
20,000+ AI undergraduate degrees annually

## Professional Development

**300 billion won**

- Industry-specific AI reskilling programs for existing workforce
- AI bootcamps and certification programs for rapid workforce development
- Industry-academia collaborative training programs
- Executive education on AI leadership and strategy

**Key Target:**
Reskill 100,000 professionals with AI capabilities across industries by 2030

## Talent Retention & Attraction Strategy

**AI Research Fellowships**
Prestigious awards with competitive compensation

**AI Startup Support**
Funding and resources for AI entrepreneurs

**Global Talent Programs**
Initiatives to attract international AI experts

**Industry Partnerships**
Collaborative research with leading tech companies

# AI Education Ecosystem Development 1/2

**Korea is developing a comprehensive AI education ecosystem spanning K-12 to professional development with strategic programs at each level.**

## K-AI Schools Network

A nationwide network of specialized AI-focused schools with advanced curriculum

**15 Specialized AI High Schools**
Advanced AI curriculum and facilities

**200 AI-Enhanced Schools**
Augmented curriculum with AI elements

**1,000 Teachers Trained**
Specialized AI education certification

**Online Learning Platform**
Accessible to all K-12 students

**Implementation: 2026-2029**

**180 billion won**

## National AI Research Fellowship

Prestigious research program to attract and retain top AI talent in academia and research

**500 Doctoral Fellowships**
Full funding for AI PhD students

**100 Senior Fellowships**
For established AI researchers

**International Exchanges**
With leading global AI institutions

**Research Resources**
Priority access to computing resources

**Implementation: 2026-2031**

**250 billion won**

# AI Education Ecosystem Development 2/2

**Korea is developing a comprehensive AI education ecosystem spanning K-12 to professional development with strategic programs at each level.**

## Continuous AI Education Pathway

### K-12 Education

Foundations of computational thinking and AI literacy

Target: All K-12 students

### Undergraduate Programs

Specialized AI majors and minors across disciplines

Target: 50,000+ students annually

### Graduate & Advanced Research

Specialized research training and advanced degrees

Target: 5,000+ Master's/PhD graduates

## Professional Development Programs

**AI Reskilling Initiative**

6-month intensive programs for career transition

**75 billion won**

**Industry-Specific Training**

Tailored AI applications for specific sectors

**90 billion won**

**Executive AI Leadership**

Strategic AI adoption for business leaders

**40 billion won**

**AI Certification Program**

National standards for AI proficiency

**35 billion won**

## Key Performance Indicators by 2030

| 100,000+ Person | 20,000+ Person | 5,000+ Person | 100,000+ Person |
|---|---|---|---|
| *K-12 students with AI skills annually* | *Undergraduate AI degrees annually* | *AI research specialists & PhDs* | *Professionals reskilled in AI technology* |

# Pillar 3 : AX transformation

# Pillar 3: Industry-wide AX Transformation (2.6T won)

## Korea is investing 2.6 trillion won (25.7%) in AI Transformation (AX) across industries

This strategic pillar focuses on applying AI technologies to transform productivity and competitive advantage across all economic sectors

### What is AX?

AI Transformation (AX) is the strategic integration of AI technologies to fundamentally transform business operations, products, and services.


### Key Components

- Process transformation through AI automation and optimization
- Product and service enhancement with AI capabilities
- Business model innovation enabled by AI insights
- Organizational culture change to embrace data-driven decision making

### Expected Outcomes

- 20-30% productivity increase across transformed sectors
- Creation of new AI-enabled products and services
- Enhanced global competitiveness in key industries
- Creation of high-value jobs and new business opportunities

## Priority Sectors for AX Implementation

### Manufacturing

- Smart factory optimization
- Predictive maintenance
- Supply chain intelligence

650 billion won

### Healthcare

- Diagnostic AI systems
- Personalized medicine
- Hospital management AI

580 billion won

### Finance

- Fraud detection systems
- Algorithmic trading
- Risk assessment AI

480 billion won

### Transportation

- Smart traffic management
- Logistics optimization
- Autonomous vehicle support

450 billion won

# AI in Public Services

**The Korean government is implementing AI technologies in public services to enhance efficiency, accessibility, and quality of government services.**

### Legal Assistance System

- AI-based legal information and consultation services
- Integration of legal structure services

**Budget: 220 million KRW**

### Intelligent Surveillance

- AI-powered CCTV for disaster prevention & military
- Intelligent monitoring of river management areas

**Budget: 5,500 million KRW**

### Other Applications

- AI-based disaster prediction systems
- Smart public transportation management
- Digital government services

**These AI implementations in public services demonstrate Korea's focus on enhancing citizen welfare and administrative efficiency through AI technology.**

# AX Sprint Project: Cross-Industry Implementation (0.9T won)

**The AX Sprint is a1.4 trillion wonflagship initiative designed to accelerate AI adoption across industries through coordinated government support**

## AX Sprint Support Framework

### Technical Support
- AI expertise and consulting
- System integration assistance
- Testing and optimization

### Financial Support
- Implementation subsidies
- Tax incentives for AI adoption
- Low-interest financing

### Skills Development
- Employee AI training
- Management capability building
- Digital transformation coaching

### Regulatory Support
- Regulatory sandboxes
- Compliance assistance
- Standards development

## Five Key Focus Areas

- Manufacturing (100)
- Biohealth (100)
- Housing & Daily Life (50)
- Logistics (30-40)
- Education & Culture (20-30)

**Total: 300 AI Applications**

## Strategic Goals

- Democratize AI technology for immediate public benefit and daily use
- Establish Korea as a global AI applications leader and innovation hub

# Pillar 4 : Investment in AI

# Pillar 4: Financial Support & Investment (0.7T won)

**Korea is allocating 0.7 trillion won (6.9%) to catalyze AI investment through financial support mechanisms**

These funds are designed to leverage private sector investment and accelerate AI adoption across the economy

250 billion won

## — Direct Financial Support

Non-repayable grants and matching funds for AI projects

**AI Project Grant Program**
- Up to 70% matching grants for SMEs
- 50% for large enterprises

**AI Proof-of-Concept Fund**
- Small-scale funding to test AI concepts
- Fast-track approval process

200 billion won

## -- Fiscal Incentives

Tax benefits and financial incentives for AI investments

**AI Investment Tax Credits**
- 30% tax credit for AI hardware investments
- 25% for AI software and services

**Accelerated Depreciation**
- 1-year depreciation for qualifying AI assets
- Enhanced write-offs for AI-specific equipment

250 billion won

## --- Investment & Financing

Loans, venture funding, and specialized financing options

**AI Fund-of-Funds**
- Government anchor investment in AI venture funds
- 5:1 targeted private capital leverage

**Low-Interest AI Loans**
- 2% interest loans for AI implementation
- Extended repayment terms (up to 10 years)

## Expected Financial Leverage

| 0.7T | 2.1T | 3:1 | 2.8T |
|---|---|---|---|
| Direct government investment | Private capital mobilized | Leverage ratio achieved | Total AI investment catalyzed |

# Conclusion

# Conclusion: Korea's AI Investment Vision

### AI Infrastructure & Data

Building world-class computing power and comprehensive AI datasets

**5.4 trillion won**

53.5% of total budget

### AI Talent Development

Creating a sustainable pipeline of AI specialists and researchers

**1.4 trillion won**

13.9% of total budget

### Industry-wide AX

Transforming industries through comprehensive AI adoption

**2.6 trillion won**

25.7% of total budget

### Financial Support

Catalyzing private sector AI investment and innovation

**0.7 trillion won**

6.9% of total budget

### Total Investment

**10.1**

trillion won
In 2026

A comprehensive fiscal commitment to Korea's AI future

## Korea's AI Vision 2030

"To establish Korea as a global AI leader with world-class infrastructure, talent, and applications, transforming our economy while enhancing the quality of life for all citizens."

### Economic Impact

**Enhanced value added by 2030**

**Increased new high-value jobs**
Across AI and related sectors

**Productivity increase**
In key industrial sectors

### Global Position

**Enhanced global AI market share**

**Top 3 global AI power**
In specialized domains

**Active standards leadership**
Shaping global AI governance

### Societal Benefits

**Enhanced public services**
Across healthcare, education, and government

**Improved quality of life**
Through AI-powered solutions

**Ethical AI development**

# Securing Fiscal Sustainability through the Success of AI Economic Transition

## AI-Based Economic Growth

- Enhanced productivity across industries through through AI-powered automation and optimization
- Creation of new industries and business models models leveraging AI technologies
- Improved global competitiveness through AI-AI-driven innovation and efficiency
- Development of high-value jobs and skilled skilled workforce in the AI ecosystem

## Securing Fiscal Sustainability

- Expanded tax revenue base through growth of AI-growth of AI-powered industries and businesses businesses
- Improved fiscal balance through AI-enhanced enhanced government operations and services services
- Strategic resource allocation leveraging AI-driven data analytics and forecasting
- Building fiscal capacity to address demographic challenges including aging population

Ministry of Economy and Finance

# Thank you

*“Thank you for your interest in the Korean government. The Korean government is determined to make its fiscal investment in AI a success—turning it into momentum for economic growth and the restoration of fiscal soundness.”*

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