



Building Future Growth Engines: Korea's Hyper-Innovation Economy Strategy

- AI, Green Transformation, and Strategic Industries

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Korea's new growth challenge

Korea's next challenge is to rebuild growth engines in a period of structural pressure

Growth slowdown

Slowing growth engines
Declining potential growth
Demographic change and stagnant productivity

Intensified competition

Technological competition
Supply-chain risks
Changes in the global trade order

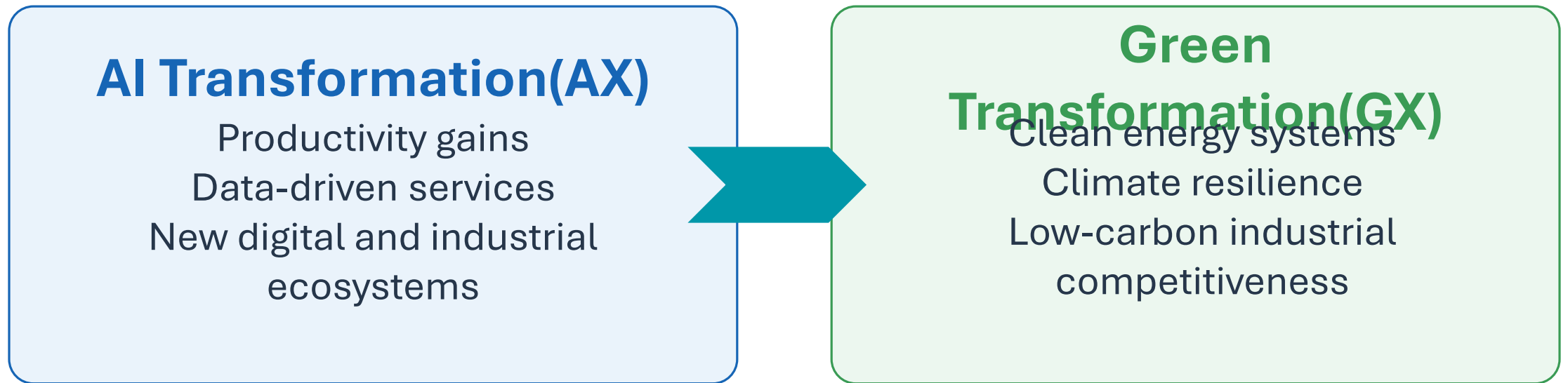
Need for a new model

Move beyond broad policy declarations
Select concrete innovation projects
Create visible outcomes

The policy question is how to create new engines of growth with visible outcomes.

AI and GX as a turning point

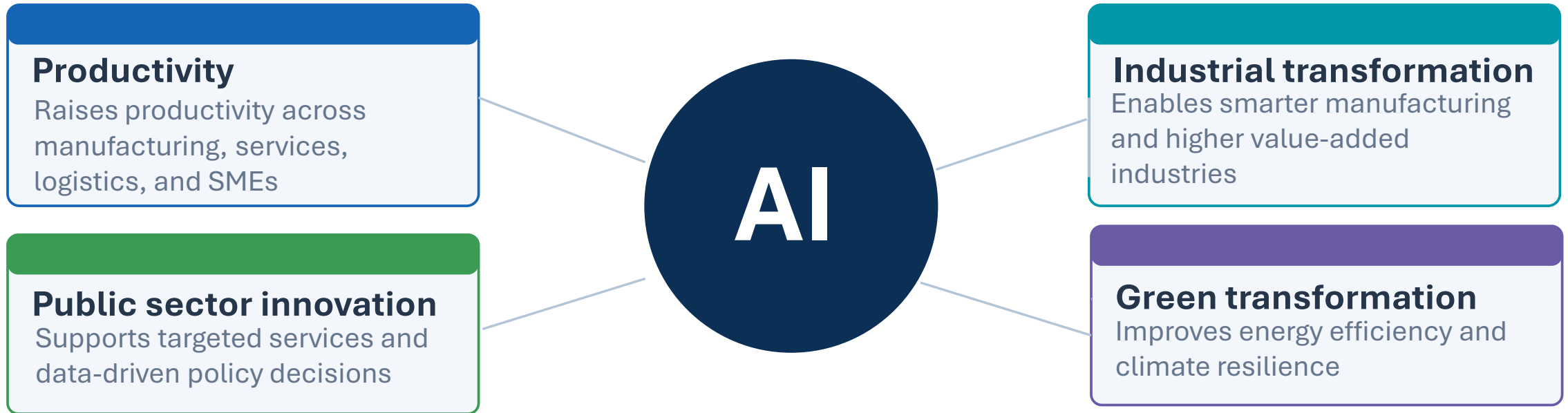
AI transformation and green transformation are reshaping the foundations of competitiveness



Korea sees AI and GX as a critical window to move toward a leading, innovation-driven economy.

AI as a core pillar of national economic transformation

Korea views AI as a foundation for future competitiveness –reshaping productivity, industry, public services, and green transformation



Korea views AI as a general-purpose infrastructure for productivity, innovation, and sustainable growth

Why Hyper-Innovation Economy?

A major economic transformation agenda to turn structural pressures into concrete growth engines

Complex growth challenge

Slowing growth engines
Declining potential growth
Intensified technological competition

Focused investment

Strategic response

Select concrete innovation projects
Provide focused investment
Offer integrated support packages
Pursue visible outcomes

Integrated support packages

Long-term goals

Secure technological sovereignty
Develop world-class technologies
Upgrade industries
Capture high-growth global markets

Visible outcomes

Hyper-Innovation Economy strategy aims to raise
Korea's potential growth rate

Building future growth drivers

The strategy covers 15 flagship projects, but the policy story is about selected growth drivers across three strategic areas

High-tech materials and parts

- Next-gen power semiconductors (SiC, GaN)
- LNG cargo tanks
- Superconductors
- Graphene
- Specialty carbon steel

Climate, energy and future readiness

- Next-generation solar power
- Next-generation power grids
- Offshore wind power, HVDC
- Green hydrogen
- Small modular reactor(SMR)
- Smart agriculture, fisheries
- Ultra-high-resolution satellites

K-Boom industries

- K-Bio and pharmaceuticals
- K-Content
- K-Beauty
- K-Food

From flagship projects to growth engines

A few examples help show how Korea is linking AI, green transformation, and strategic industries in practice

Next-generation power semiconductors

Core to EVs, renewable energy systems, data centers, and next-generation power grids

SMR and green hydrogen

Reliable low-carbon energy options in an increasingly AI-driven and energy-intensive economy

LNG cargo tanks

Core technology for high-value shipbuilding and stable energy transport

K-Content / K-Bio / K-Food

AI-enabled opportunities in services, healthcare, creative industries, exports, and partnerships

Flagship projects are practical vehicles to turn AX, GX, and industrial innovation into future growth engines

Who drives the Hyper-Innovation Economy?

A performance-oriented, cross-ministerial organization established to implement the Hyper-Innovation Economy Strategy



Reference points from Korea's experience

Korea's experience is not a ready-made model, but it may offer useful reference points for partner countries

Start from national priorities

Identify where AI can address concrete development needs: energy, agriculture, climate resilience, health, or public services

Build implementation platforms

Strategies need institutional ownership and practical links to data, regulation, finance, testbeds, and delivery mechanisms.

Link AI with industry and GX

AI becomes more meaningful when connected with productive sectors, clean energy, and industrial upgrading

Keep the transition inclusive

Support SMEs, workers, regions, and citizens so that AI expands opportunity rather than widening existing gaps.

Thank you

*The Hyper-Innovation Economy
turns strategic innovation into future growth engines*