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[Trade, Industry, and Public Affairs Newsletter] The Government's AI Data Center Mega Project: Business Opportunities and Legal Risks

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Featured Analysis

The Government's AI Data Center Mega Project: Business Opportunities and Legal Risks

The Korean government's "Three Mega Projects for Korea's Great Leap Forward" represent a national strategy to integrate semiconductors, physical AI, and AI data centers, with the objective of positioning Korea as a global hub for AI and advanced industries. Of the three, the AI data center initiative aims to establish a large-scale nationwide computing infrastructure and to develop export-oriented businesses in upstream and downstream industries—including semiconductors, servers, power, cooling, and cloud services.

According to the government's announcement, SK, GS, Naver, and other major companies are pursuing as Phase 1, AI data center projects with an aggregate capacity of 8.4 GW: SK, GS and Naver will each build 5 GW, 2.4 GW, and 1 GW respectively, toward the overall target of 18.4 GW in total, including longer-term scale-up plans. The long-term private investment plan, including capital raised in the future, was announced to be around KRW 550 trillion.

The KRW 550 trillion sum, however, is neither a fixed and final government budget nor a project cost that has been committed or ordered: the ultimate investment scale and timing will be decided according to site readiness, power availability, permits and approvals, customer demand, financing, and each company's internal decision-making. Therefore, participating companies should assess the feasibility of each individual project and specific contractual terms, rather than solely relying on policy announcements.

1. Industrial Ecosystem and Participation Opportunities

Around 400 companies and institutions participated in the "AI Data Center Alliance," launched in July 2026. The chair group included Naver Cloud, Samsung SDS, SK Telecom, NHN Cloud, LS Electric, LG Electronics, GS, KT, FuriosaAI, among others.

Opportunities to participate are expected to be offered not only to data center developers, operators, and cloud service providers, but also to companies in various sectors including AI semiconductors and servers, networks, power equipment, power generation and energy, cooling and HVAC, construction and engineering, finance, security, testing and certification. The government's plan is to use large-scale testbeds to demonstrate domestic equipment and solutions, and to export data center design, construction, and operation as an integrated package.

2. Institutional Support under the Special Act

The "Special Act on Promotion of the Artificial Intelligence Data Center Industry" was enacted on June 9, 2026 and is scheduled to take effect on March 10, 2027.

The Special Act introduces a one-stop process for permits and approvals, establishes procedural deadlines, and provides a timeout mechanism under which the permit and approval procedure is deemed completed if no refusal notice is issued within the prescribed period. Other newly introduced legal bases include special treatment for grid impact assessments for AI data centers located outside the metropolitan area, designation of special zones, special cases for occupancy in industrial complexes and port hinterlands, and support for technology development and global market entry.

The Special Act does not, however, waives or guarantees approval for all permits and licenses. Companies must fulfill substantive requirements under individual laws—including those relating to construction, firefighting, environment, and electricity. Processing periods may be extended if procedure requires resident opinion hearings or a supplementation of application documents.

Under the Special Act, the specific standards for the facilities and the scale of AI data centers, as well as the scope of special cases for grid impact assessments, are delegated to subordinate statutes. As of September 2026, the legislation for the subordinate statutes are under way, so companies should refrain from fixing their investment timelines or profitability projections in advance on the assumption that special cases will apply. In addition, given the Ministry of Climate, Energy and Environment's advance notice for public comment of a draft of the "Regulations on the Operation of the Grid Impact Assessment System" pursuant to the Special Act on the Promotion of Distributed Energy, the consistency between the two statutory regimes warrants careful review.

3. Key Risk Points for Review by Project Participants

• Securing Power

The government's announcement of support, or the presence of a nearby power plant, does not in itself guarantee that power would be supplied. Even if a company is exempted from grid impact assessment, it must individually address constraints in transmission and distribution capacity.

Participating companies should confirm both the contracted power capacity and the actual timing of power supply. In particular, they should verify whether the power supply schedule aligns with the construction and operational schedule for the data center.

The allocation of costs required for the construction of transmission lines and substations and grid reinforcement must be clearly determined among the parties. Contractual terms must include scenarios of delay in power supply or the non-delivery of the agreed capacity. Issues such as rescission rights, extension of construction period, and allocation of losses should also be defined in advance.

The potential transfer of the data center development rights should also be contemplated at the outset. In connection with any such transfer, the applicable conditions for the transfer and succession of contractual rights and obligations should be clearly specified to ensure that the new project operator may assume the existing power purchase agreement.

Securing power should be treated as a core condition precedent to the project, preceding land acquisition, EPC contracts, financing, and customer contracts.

• Permits, Approvals, and Location

AI data centers are subject to overlapping regulations across national land planning, industrial location, construction, electricity, firefighting, and environmental regimes. Data centers may not be granted occupancy even if a site is inside an industrial complex. The developer must confirm whether the industrial complex master plan allows the occupancy of data centers and check the sequential order for various permits and approvals, as well as their processing timeline, in advance.

If the project is to be located in an industrial complex, the operating structure must also be reviewed. This is particularly important if the developer and the operator are non-identical entities. A thorough review must be conducted on whether the outsourced operating structure complies with the governing laws and regulations for industrial complexes.

The possibility of future changes to the design or business plan should also be considered in advance. The developer should review the effect those changes may have on existing permits and approvals, and whether they trigger the need for additional permits and approvals.

If a local government has promised support for sites, infrastructure, tax incentives, or other similar matters, the legal basis for such commitment should be clearly confirmed in advance, and once confirmed, whether the appropriate budget has actually been secured should also be verified.

Even if certain permits and approvals are processed on a one-stop basis under the Special Act, this does not mean that all administrative procedures are completed without any further action. A comprehensive project-wide permitting roadmap should be prepared covering matters requiring individual permits and approvals for each aspect of the project, their sequencing and interdependencies, the responsible authorities, and anticipated processing timelines.

• Environment and Local Communities

Large-scale data centers consume substantial amounts of power and water. Issues may arise in relation to greenhouse gas emissions, operation of emergency generators, noise, and waste heat.

Resident opposition or civil complaints may arise during the installation of transmission lines and substations. In practice, data center development projects have often been delayed due to local community complaints.

The project operator should confirm the required environmental permits and approvals and applicable energy-efficiency standards, and also establish an operating system capable of managing greenhouse gas emissions, emergency generators, noise, waste heat, and related matters.

Procedures for collecting resident opinions and response measures for local community complaints should also be prepared before the permit and approval application filings are submitted.

If the facility is marketed as environmentally friendly or renewable-energy-based, the actual power procurement structure and environmental performance should be checked for consistency with the promotional statements.

• EPC and Equipment Supply Contracts

If a problem occurs in any one of construction, power, cooling, servers, or networks, the operation of the entire data center may be delayed. Even if each facility satisfies its individual performance standards, the integrated system may still fail to achieve the agreed performance and availability.

Contracts should clearly allocate the responsibilities for design and facility interfaces. They should also specify the standards for integrated testing and performance acceptance, as well as the point at which completion occurs. The scope of responsibilities and compensation for delays in schedule, failure to satisfy performance standards, or increases in construction costs should also be reflected in the contracts.

Given the rapid turnover of AI equipment generations, the initial design should, as appropriate, consider and accommodate the potential adoption of high-density servers and liquid cooling.

• Supply Chain and Export Controls

High-performance GPUs and network equipment are highly dependent on overseas suppliers and may be affected by export controls, economic sanctions, or supply shortages.

Supply contracts should determine the party responsible for obtaining export licenses and for legal compliance relating to economic sanctions. They should also pre-arrange substitute products that may be used if equipment supply is disrupted, as well as procedures for specification changes. The allocation of risks arising from the fluctuation of prices, exchange rates and tariffs, and the conditions for returning advance payments in the event of non-delivery of the equipment, should likewise be clearly stipulated.

If a participant joins a pilot project involving domestically produced equipment, separate provisions should be included to address issues such as failure to meet performance standards, clawback of government subsidies, and ownership of technology developed under the project.

• **Customer Acquisition and Business Feasibility**

A data center's profitability is decided by actual utilization rates and long-term customer contracts, not announcements of facility capacities. If the data center fails to secure anchor customers, this may impede project financing.

Customer contracts should seek to secure minimum usage commitments or minimum revenue guarantees. The contract term, early termination rights, and methods to enhance customer credit should also be reviewed. The method for reflecting changes in operating costs, such as power costs, into usage fees, and liability for breaches of availability service-level agreements, should also be pre-determined.

If construction commencement precedes long-term customer acquisition, a business feasibility analysis must be conducted to reflect the possible risks from changes in AI technology, expansion of competing facilities, and decline in computing prices.

• **Financing and Government Support**

The availability of policy-based financing should not, by itself, be viewed as guaranteeing financial support or the commercial profitability of the relevant project.

The level of power secured, permits and approvals, and long-term customer contracts required to close project financing should be confirmed in advance. The EPC contractor's completion guarantee and the sponsor's obligation to make additional contributions should also be negotiated. If subsidies or tax incentives are received, the conditions for maintaining that support and the grounds for clawback should also be reviewed.

Letters of intent from the government or a local government should be evaluated separately from legally binding payment guarantees or minimum revenue guarantees.

• **Data and Security**

Even where a data center operator does not directly process customer data, it may nevertheless incur liability or other regulatory obligations in its capacity as a personal information processor or cloud service provider.

The requirements for processing personal information, subcontracting, and cross-border transfers should be reflected in the contracts. Notification and joint response obligations in the event of a security incident, as well as responsibility for backup and disaster recovery, should also be determined. Ownership of data and AI models, the scope of reuse, and return and deletion procedures upon contract termination should likewise be clearly stipulated.

To attract customers in the public, financial, medical, defense sectors, sector-specific requirements for security, network separation, and certification should be incorporated from the design stage.

• **Operation of Consortium**

Delays in decision-making and gaps in responsibility may arise when there is joint participation of developers, power generation companies, telecommunications companies, construction companies, equipment companies, and financial institutions.

Consortium agreements should clearly define each participating company's role, including equity contribution, technology, and sales, as well as the criteria for bearing additional costs. Procedures for decision-making on material matters and mechanisms to resolve conflicts of interest or deadlocks should also be established. Procedures for share transfers, early withdrawal by participating companies, and project failure should also be determined in advance.

In joint bidding or technical cooperation among competitors, competition-law controls are also required to limit the scope of sharing sensitive information, such as prices, customers, and supply volumes.

4. Preparation Guidelines for Participating Companies

Participating companies should first clearly define the role they will assume in the project. The scope of responsibility will differ depending on whether a participant acts as developer and operator, investor, power supplier, EPC contractor, equipment supplier, or cloud service provider. Responsibility may also differ for permits and approvals, financing, performance guarantees, and operation.

Preliminary due diligence should also be conducted for each individual project. Title to land and suitability of location should be confirmed, as well as the stages of power supply and the status of permits and approvals, and whether any local government promise of support is legally binding.

The Special Act should be reviewed in detail, and project schedules and project costs should be calculated separately for scenarios in which special treatment applies and scenarios in which it does not.

For suppliers, it is important to secure binding purchase orders or supply contracts rather than simple memoranda of understanding. Contracts should clearly set out volume, delivery schedule, price adjustment, and minimum purchase conditions. They should also include acceptance criteria and compensation terms in the event of contract cancellation. This will increase the likelihood of actual order receipt.

The contractual relationships for the entire project should also be managed on an integrated basis because responsibilities and schedules under land, power, EPC, equipment, financing, and customer contracts are interdependent. The overall contractual structure should be reviewed so that risks not recoverable under one contract are not concentrated on a particular project participant.

We support due diligence on major legal issues, including AI data center sites, power procurement, and permits and approvals, as well as the establishment of investment vehicles and the preparation of various contracts and legal documents required for site acquisition and construction.

We identify and connect the requirements for consortium formation, project financing structures, and policy support from the government and local governments. We also support the drafting and negotiation of contracts for power supply, EPC, equipment supply, cloud services, and data center usage.

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Global Trade and Industry Issue FOCUS 1

How Are General Data Centers Different from AI Data Centers?

General data centers (hereinafter, "DCs") and AI data centers (hereinafter, "AIDCs") both operate servers and network equipment. Their purposes and facility structures, however, differ materially. Because AIDCs must process large-scale AI computations, they require network, power, cooling, and building-design conditions that differ from those of existing data centers. The differences are summarized below.

First, they have different purposes. DCs operate various information services, such as websites, enterprise business systems, databases, and cloud services. The key objective is to maintain stable service delivery.

By contrast, AIDCs are focused on training and inference for large-scale AI models. They also provide services, such as chatbots, search, and recommendations, using completed AI models. If DCs are the infrastructure for operating a broad range of digital services, AIDCs are facilities for performing large-scale computation.

Second, they use different computing devices. DCs are organized around CPU-based servers suited to general-purpose computing.

In AIDCs, by contrast, AI accelerators such as GPUs and NPUs play a central role. These accelerators are specialized for large-scale parallel computation. Training and inference for AI models process identical or similar calculations simultaneously and at scale. Thousands to tens of thousands of AI accelerators are deployed.

Third, they have different network architectures. For DCs, stable external connectivity is important. They must exchange data smoothly with the Internet or with other data centers.

In AIDCs, by contrast, internal connectivity is more important. Vast amounts of data must move quickly between servers and accelerators. Thousands of GPUs must operate simultaneously as if they were a single giant computer. For this purpose, ultra-high-speed, ultra-low-latency internal networks and high-capacity storage are required.

Fourth, they require different scales of power. AIDC servers consume far more power than DC servers. DCs are often on the scale of several MW to several tens of MW.

AIDCs, by contrast, often exceed 100 MW. Hyperscale AIDCs are designed on the premise of power capacity ranging from several hundred MW to more than 1 GW. Accordingly, the expansion of AIDCs raises issues for the national power grid, including power plants and transmission networks.

Fifth, they have different cooling methods. AI accelerators consume large amounts of power thus generate substantial heat. DCs have typically relied on air cooling.

In AIDCs densely packed with high-performance GPUs, however, air cooling alone may not be sufficient to manage heat. As a result, high-density cooling technologies play an increasingly important role. Representative methods include direct-to-chip liquid cooling and immersion cooling. Direct-to-chip liquid cooling supplies coolant to the vicinity of chips, while immersion cooling dissipates heat by immersing servers in an insulating coolant.

Sixth, their buildings and power infrastructure have different designs. AIDCs go further than merely adding GPU servers to existing buildings. They require substation facilities capable of accommodating large-scale power, high-capacity uninterruptible power supply (UPS) systems, and piping for high-density cooling.

Another factor to consider is the high potential of AI accelerators being replaced in the future by even higher-performance models. Therefore it is important to accommodate future expansions of power and cooling capacity in the initial design, so as to address in advance the possibility of securing insufficient power and cooling capacity even after the building is completed.

Even among AIDCs, server and network configurations and operating strategies may vary depending on the tasks performed. AIDCs can be broadly divided into training facilities and inference facilities, which operate differently. Training data centers are used to develop AI models. In that context, the most important ability is to synchronize and compute with numerous GPUs simultaneously over extended periods. Inference data centers provide services using completed models. In that context, the most important ability is to respond rapidly to requests from many users, while lowering the power and accelerator usage costs.

In summary, DCs are “digital infrastructure” that provides various information services, such as web services, enterprise systems, and cloud services in a stable manner. AIDCs, by contrast, are closer to “high-density computing factories” that perform large-scale AI computations by inputting massive amounts of power and data.

AIDCs must be designed as a single system that includes not only GPU servers, but also networks, the power grid, cooling, and building structure. This is the most important distinction between general DCs and AIDCs.

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Global Trade and Industry Issue FOCUS 2

Public Opinion For and Against AI Data Centers: Three Differences Between the United States and Korea

In the U.S., opposition against AI data centers (hereinafter, “AIDCs”) has recently been increasing. The opposition is not limited to a local “not in my backyard” stance, but has also surged on a federal level.

Resident opposition to data center locations also exists in Korea. However, the likelihood of public opposition against the expansion of AIDCs per se, as in the U.S., appears relatively low. This opinion rests on three key differences.

First, the method of charging electricity rates.

The principal driver of opposition to AIDCs in the U.S. is “rising electricity rates.” AIDCs use enormous amounts of electricity and also require increased investment in power generation facilities and transmission networks. Those costs are passed on to consumers through electricity rates. Americans may therefore ask, “Why should I pay higher electricity rates because of Big Tech’s AI business?”

Electricity rates in the U.S. are largely charged on a regional basis and are set by private utilities. Rates vary significantly by region, which is different from the way Korea’s electricity-rate is calculated and imposed. Korea Electric Power Corporation, a quasi-state-owned enterprise whose prices are controlled by the government, de facto monopolizes electricity sales. The electricity-rate system is also applied nationwide. The entry of a data center into a particular region does not cause a surge in electricity rates for residents of that specific region. In other words, unlike in the U.S., there is a weaker correlation between AIDC constructions and surging electricity rates.

Second, the perspective on AI data centers.

In the U.S., AIDCs are perceived as Big Tech facilities. Building large-scale data centers is part of the AI race among major tech companies such as Amazon, Microsoft, Google, and Meta. There is a growing distrust that local communities are bearing the costs associated with AIDCs for the profit-making activities of the companies. Expectations of job growth from AIDCs also tend to fall short of expectations, compared to the tax benefits and support for power infrastructure.

In Korea, by contrast, AIDCs are strongly perceived as “national strategic infrastructure.” People view them as facilities essential to AI and a competitive edge in the semiconductor industry. At the same time, they are also perceived as desirable for “acquiring funding from large companies.”

A representative case is the government’s announcement that the three mega projects would be built in Honam: while Honam is hugely welcoming the announcement, other regions are discontent, and the more dominant public opinion is, "why is it being built in another region and not in ours?"

Third, the United States is closer to "excess," while Korea is closer to "shortage."

The U.S. already has the world's largest AIDC market. Electricity demand and the burden on transmission networks are rising rapidly. A change is evident in the trending questions in the U.S. If, in the past, the question was "are data centers necessary?" recently, the more salient question has become "how many more must be built?" This is the background to arguments that the pace of data center construction should be slowed or that new construction should be suspended for a certain period. Korean public lean towards the view that AIDCs essential for AI competition still remain insufficient.

In summary, U.S. has a stronger opposition to AIDCs, while Korea has a more favorable public opinion to AIDCs. This is true both nationwide and at the level of local governments.

The principal reason Americans oppose the local construction of AIDCs is that "residents bear the costs, with few benefits in return." In the U.S., electricity is supplied by private companies, and electricity rates are charged on a state or region basis.

This is not the case in Korea. Because Korea Electric Power Corporation, a quasi-state-owned enterprise, supplies electricity, price controls are in place, and electricity rates are determined on a nationwide basis rather than on a region-by-region basis. Building an AIDC in the region means more companies may consider moving in, which moves the public opinion toward a more favorable view.

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