

ACT ON THE CREATION AND FACILITATION OF USE OF SMART GRIDS

Act No. 10714, May 24, 2011

CHAPTER I | GENERAL PROVISIONS

Article 1 (Purpose)

The purpose of this Act is to create smart grids and facilitate the use thereof to develop related industries, cope actively with global climate changes, lay a foundation for future industries oriented to low carbon and green growth, and ultimately contribute to the improvement of the environment for the use of energy and the growth of the national economy.

Article 2 (Definitions)

The terms used in this Act shall be defined as follows:

1. The term “power grid” means electrical facilities necessary to generate electricity and supply it to its users, and the system to control and manage such facilities;
2. The term “smart grid” means a power grid that maximizes efficiency in the use of energy by supplying electricity with information and communications technologies applied thereto, through which suppliers and users of electricity can exchange information on a real-time basis;
3. The term “smart grid information” means all kinds of data or knowledge processed by optical or electronic means for the creation and use of a smart grid and expressed in code, letters, voice, sound, or images;
4. The term “smart grid technologies” means technologies specified by Ordinance of the Ministry of Knowledge Economy for the creation and use of smart grids;
5. The term “smart grid project” means any of the following projects for supplying goods for the creation and use of a smart grid or for providing services through a smart grid:

- (a) A project for the construction of infrastructure for smart grids;
 - (b) A project for manufacturing apparatuses or products for smart grids;
 - (c) A project for providing services through a smart grid;
6. The term “smart grid business operator” means a person engaged in a smart grid business.

Article 3 (Responsibilities of Government, etc.)

- (1) The Government shall prepare measures for the systematic growth of the smart grid industry by improving regulations on smart grid projects and creating an environment for successfully inducing investment from the private sector;
- (2) Smart grid business operators shall participate in the implementation of measures taken by the Government for the systematic growth of the smart grid industry and shall cooperate with the Government in such measures.

Article 4 (Relationship to other Acts)

Except as otherwise provided for in the Act on Promotion of Information and Communications Network Utilization and Information Protection, etc. and other Acts, the creation and use of smart grids and the collection, utilization, and protection of smart grid information shall be governed by this Act.

CHAPTER II MASTER PLAN FOR SMART GRIDS, ETC.

Article 5 (Establishment and Implementation of Master Plan for Smart Grids)

- (1) The Government shall, every five years, establish and implement a master plan for creating and facilitating the use of smart grids (hereinafter referred to as “master plan”).
- (2) A master plan shall include the following:
 - 1. Matters regarding the goals of and direction setting for medium- and long-term policies on smart grids;
 - 2. Matters regarding the development, substantiation, distribution, and diffusion of smart grid technologies;
 - 3. Matters regarding the operation and use of smart grids;
 - 4. Matters regarding the promotion of the smart grid industry;
 - 5. Matters regarding the standardization, testing, inspection, and certification of smart grids;
 - 6. Matters regarding the training of smart grid professionals;

7. Matters regarding the expansion of overseas markets and international cooperation for the smart grid industry;
 8. Matters regarding the protection of smart grid information and ensuring stability;
 9. Matters regarding investment in smart grids;
 10. Matters regarding the improvement of systems for smart grids;
 11. Other matters necessary for the creation and facilitation of use of smart grids.
- (3) If the Government intends to establish or revise a master plan, it shall submit the plan to the Green Growth Committee under Article 14 of the Framework Act on Low Carbon, Green Growth for deliberation: Provided, That the foregoing shall not apply to any revision of insignificant matters specified by Presidential Decree.
- (4) Except as otherwise provided for in paragraphs (1) through (3), matters necessary for the establishment and implementation of a master plan shall be prescribed by Presidential Decree.

Article 6 (Establishment and Implementation of Implementation Plan for Smart Grids)

- (1) The Minister of Knowledge Economy shall, every year, establish and implement an implementation plan for the creation and facilitation of use of smart grids (hereinafter referred to as “implementation plan”) in order to carry out the master plan.
- (2) An implementation plan shall include the following:
1. A detailed action plan for the implementation of the master plan in the relevant year;
 2. Matters regarding coordination between the master plan and other plans and policies;
 3. Matters regarding the management of goals for, and the performance of, implementation in the relevant year;
 4. Matters regarding the role of related central administrative agencies, local governments, and other legal entities, organizations, or institutions participating in the creation and facilitation of use of smart grids;
 5. Other matters necessary to create and facilitate the use of smart grids.
- (3) Except as otherwise provided for in paragraphs (1) and (2), matters necessary for the establishment and implementation of an implementation plan shall be prescribed by Presidential Decree.

Article 7 (Prior Consultation)

If a central administrative agency, a local government, or an institution specified by Presidential Decree intends to establish and implement a plan for the creation and use of

smart grids, it shall consult with the Minister of Knowledge Economy thereon in advance.

Article 8 (Preparation and Disclosure of Statistics of Smart Grids)

- (1) In order to efficiently establish and implement a plan for smart grids, the Minister of Knowledge Economy shall prepare and manage statistics of smart grids in consultation with the Commissioner of the Korea National Statistical Office.
- (2) In order to facilitate the use of smart grids, the Minister of Knowledge Economy shall disclose the statistics under paragraph (1) to the public: Provided, That the foregoing shall not apply to non-disclosable information under Article 9 of the Official Information Disclosure Act.

Article 9 (Establishment, etc. of Plan for Conversion to Smart Grids)

- (1) If necessary to ensure the participation of suppliers and users of electricity, the Minister of Knowledge Economy may establish and implement a plan for conversion for each period and phase (hereinafter referred to as “conversion plan”) with regard to the introduction and replacement of instruments and products held by suppliers and users of electricity.
- (2) The Minister of Knowledge Economy shall endeavor to improve systems regarding electronic equipment under subparagraph 16 of Article 2 of the Electric Utility Act and electrical appliances under subparagraph 1 of Article 2 of the Electrical Appliances Safety Control Act.
- (3) If necessary to efficiently implement a conversion plan, the Minister of Knowledge Economy may designate target areas, target instruments and products, target services, and target businesses, and provide them with administrative and financial support as necessary.
- (4) When the Minister of Knowledge Economy establishes a conversion plan, he/she shall publicize it on the Official Gazette without delay.

Article 10 (Support for Research and Development)

In order to encourage research on and development of smart grids, the Government may provide a person who performs any of the following activities with administrative and financial support as necessary:

1. Development of smart grid technologies;
2. Development of education courses relating to smart grids and training of human resources;

3. Other activities specified by Presidential Decree in order to encourage research on and development of smart grids.

Article 11 (Promotion, etc. of International Cooperation)

- (1) In order to take initiative in coping internationally with climate change and promote the expansion of international markets for smart grid projects, the Minister of Knowledge Economy shall ascertain international trends and promote international cooperation.
- (2) In order to promote international cooperation in smart grid projects, the Minister of Knowledge Economy may render assistance in projects for the exchange of technologies and human resources relating to smart grids and international standardization and international joint research and development of smart grids.

CHAPTER III ESTABLISHMENT OF INFRASTRUCTURE FOR SMART GRIDS AND FACILITATION OF USE OF SMART GRIDS

Article 12 (Registration, etc. of Smart Grid Business Operators)

- (1) A person who intends to carry out any of the following smart grid projects shall meet the registration standards with regard to professionals, capital, and other relevant elements and shall obtain registration with the Minister of Knowledge Economy:
 1. A project for the construction of infrastructure for smart grids;
 2. A project for providing smart grid services.
- (2) If a person intends to make a change to any material fact specified by Presidential Decree, among those registered in accordance with paragraph (1), he/she shall file an alteration registration.
- (3) The procedure and methods of registration and alteration registration under paragraphs (1) and (2) and other matters necessary for registration shall be prescribed by Presidential Decree.

Article 13 (Revocation of Registration)

If any of the following events occurs with respect to a smart grid business operator registered in accordance with Article 12 (1), the Minister of Knowledge Economy may revoke the registration: Provided, That registration shall be revoked in the case of subparagraph 1:

1. If he/she files the registration by any fraudulent or wrongful means;

2. If he/she fails to meet the registration standards under Article 12 (1);
3. If he/she fails to file an alteration registration of any material fact, in violation of Article 12 (2);
4. If he/she receives support under this Act by any fraudulent or wrongful means or uses a subsidy for any other purpose.

Article 14 (Subsidization, etc. of Investment Expenses)

- (1) Where a smart grid business operator registered in accordance with Article 12 (1) makes an investment necessary for the realization of public interest, such as publicness and safety of smart grids, as prescribed by Presidential Decree, the Government may fully or partially subsidize expenses incurred therein.
- (2) Expenses incurred in subsidization under paragraph (1) may be disbursed from any of the following funds or budgets:
 1. The Electrical Industry Foundation Fund under Article 48 of the Electric Utility Act;
 2. The Fund for Promotion of Information and Communications under Article 41 of the Information and Communications Technology Industry Promotion Act;
 3. The Special Accounts for Energy and Resources-Related Projects under the Act on the Special Accounts for Energy and Resources-Related Projects.

Article 15 (Certification)

- (1) In order to ensure stability and interoperability of smart grids, the Minister of Knowledge Economy may issue certification for each of the following, as prescribed by Ordinance of the Ministry of Knowledge Economy:
 1. Smart grid instruments and products;
 2. Smart grid services;
 3. Buildings in which smart grid instruments and products are installed.
- (2) Standards for certification under paragraph (1) (hereinafter referred to as “certification standards”) shall be prescribed by Presidential Decree after consulting with related central administrative agencies.
- (3) If either of the following events occurs with respect to a person who obtained certification, the Minister of Knowledge Economy shall revoke the certification:
 1. If he/she obtains certification by any fraudulent or wrongful means;
 2. If he/she fails to meet the certification standards under paragraph (2).
- (4) A person who has obtained certification under paragraph (1) may place a mark of certification on relevant smart grid instruments or products, or advertise the fact that

he/she has obtained the certification (including advertising on the Internet or by any other electronic means; the same shall apply hereinafter), as prescribed by Ordinance of the Ministry of Knowledge Economy.

- (5) A person who fails to obtain certification under paragraph (1) shall neither place the mark of certification under paragraph (1) or any similar mark, nor advertise that he/she has obtained the certification.

Article 16 (Certification Agencies)

- (1) In order to perform certification affairs under Article 15 (1) in an efficient manner, the Minister of Knowledge Economy may designate a person who meets the standards prescribed by Presidential Decree with regard to professionals, financial capability and other relevant elements, as a certification agency.
- (2) If either of the following events occurs with respect to a certification agency designated pursuant to paragraph (1), the Minister of Knowledge Economy may revoke the designation: Provided, That the designation shall be revoked in the case of subparagraph 1:
 1. If he/she obtains designation by any fraudulent or wrongful means;
 2. If he/she fails to meet the standards for designation under paragraph (1).
- (3) Matters necessary for the designation of certification agencies under paragraph (1) shall be prescribed by Ordinance of the Ministry of Knowledge Economy.

Article 17 (Promotion of Standardization)

- (1) In order to secure stability and interoperability of smart grids, the Minister of Knowledge Economy may establish standards for technologies, products, and services relating to smart grids and publicize such standards.
- (2) The Minister of Knowledge Economy may recommend smart grid business operators to comply with the standards under paragraph (1).

Article 18 (Designation, etc. of Central Districts)

- (1) If necessary to establish smart grids and promote increased use of smart grids, the Minister of Knowledge Economy may designate central districts of smart grids (hereinafter referred to as “central districts”), as prescribed by Presidential Decree.
- (2) If necessary to develop and operate central districts, the State or a local government may fully or partially subsidize development and operating expenses incurred therein.
- (3) If necessary to develop and operate central districts, the Minister of Knowledge Economy

may request the head of a related central administrative agency or the head of a local government to provide special administrative exemptions.

- (4) If any of the following events occurs, the Minister of Knowledge Economy may revoke the designation of a central district: Provided, That the designation shall be revoked in the case of subparagraph 1:
1. If it is designated by any fraudulent or wrongful means;
 2. If a reasonable ground exists to conclude that it is difficult to achieve the purposes of the designation.

Article 19 (Designation, etc. of Agencies Assisting with Promotion of Smart Grid Industry)

- (1) In order to render efficient assistance in the following activities, the Minister of Knowledge Economy may designate a person who meets the standards prescribed by Presidential Decree with regard to professionals and other relevant elements as an agency assisting with the promotion of the smart grid industry (hereinafter referred to as “assisting agency”):
1. Survey of and research on policies and systems for the promotion of the smart grid industry;
 2. Implementation of projects for the substantiation of smart grid technologies;
 3. Distribution and diffusion of smart grid technologies, instruments and products;
 4. Protection of smart grid information and ensuring safety.
- (2) The Minister of Knowledge Economy may, within budgetary limits, subsidize expenses incurred by an assisting agency in performing activities under any subparagraph of paragraph (1).
- (3) If any of the following events occurs with respect to an assisting agency, the Minister of Knowledge Economy may revoke the designation of the assisting agency: Provided, That the designation shall be revoked in the case of subparagraph 1:
1. If it is designated by any fraudulent or wrongful means;
 2. If it fails to meet the designation standards under paragraph (1).
- (4) The procedure for the designation of assisting agencies under paragraph (1) and other matters necessary for the designation shall be prescribed by Ordinance of the Ministry of Knowledge Economy.

Article 20 (Smart Grid Association)

- (1) In order to promote the robust development of the smart grid industry and pursue

common interests of smart grid business operators, smart grid business operators may establish a smart grid association (hereinafter referred to as the “Association”) with authorization by the Minister of Knowledge Economy.

- (2) The Association shall be a corporate entity.
- (3) The Association shall be duly formed by completing the registration of its establishment with the registry office having jurisdiction over its principal place of business.
- (4) Except as otherwise provided for in this Act, the provisions regarding incorporated associations in the Civil Act shall apply mutatis mutandis to the Association.

CHAPTER IV COLLECTION, UTILIZATION, AND PROTECTION OF SMART GRID INFORMATION

Article 21 (Collection and Management of Smart Grid Information)

In order to efficiently manage and operate smart grids, the Minister of Knowledge Economy may collect statistical information on smart grids from smart grid business operators and manage such information by type and sector.

Article 22 (Collection, etc. of Personal Information in Smart Grids)

- (1) No one shall collect or process smart grid information about an individual which is identifiable with the individual's name, resident registration number, etc. (hereinafter referred to as “personal information in smart grids”) without the consent of the individual (hereinafter referred to as “subject of information”).
- (2) A subject of information may request a person who holds smart grid information about him/her to inspect, correct or delete the information: Provided, That he/she shall not request the deletion of information about him/her if collecting such information is specifically permitted by any other Act.
- (3) Upon request under paragraph (2), a person who holds smart grid information shall immediately conduct an investigation thereon to inspect, correct, or delete the information and take other necessary measures and then notify the subject of information of the results thereof.

Article 23 (Provision, Sharing, etc. of Smart Grid Information)

- (1) If necessary to smoothly provide smart grid services, a smart grid business operator may

request another smart grid business operator to provide or share smart grid information.

- (2) If a person intends to provide or share smart grid information including personal information in smart grids pursuant to paragraph (1), he/she shall notify the subject of information of each of the following to obtain consent thereto:
 1. The person who desires to access or share the personal information in smart grids;
 2. Purposes of holding or using the personal information in smart grids by the person mentioned in subparagraph (1);
 3. duration for which the person mentioned in subparagraph (1) wishes to hold or use the personal information in smart grids;
 4. Items of the personal information in smart grids to be provided.
- (3) A person who accesses or shares smart grid information pursuant to paragraph (1) or (2) shall neither provide the information to a third party nor use the information for any purpose other than that for which the information is provided, unless the subject of information consents to it or any other Act specifically provides otherwise.
- (4) Unless there is any justifiable cause, a person who receives a request under paragraph (1) shall accept the request for agreement in good faith.
- (5) If it is impossible to make an agreement under paragraph (4) or the parties fail to reach an agreement, either party may request the Minister of Knowledge Economy to mediate the case, as prescribed by Presidential Decree.

Article 24 (Ensuring Proper Collection and Utilization of Smart Grid Information)

- (1) The Minister of Knowledge Economy may establish standard terms and conditions for the collection and utilization of smart grid information and may recommend smart grid business operators to implement such terms and conditions.
- (2) The Minister of Knowledge Economy may recommend smart grid business operators to establish regulations on the following matters and to implement such regulations:
 1. The standard process of inspection, correction, or deletion of smart grid information;
 2. Other matters for ensuring proper collection and utilization of smart grid information.

Article 25 (Measures for Protection, etc. of Smart Grids)

- (1) The Minister of Knowledge Economy shall establish and implement measures to protect smart grids with the participation of central administrative agencies related to smart grids, local governments, smart grid business operators, and users of smart grid services.
- (2) The Minister of Knowledge Economy may render assistance in the establishment of

measures for the protection of smart grids, in which an organization of smart grid business operators or an organization of users of smart grid services participates, and in their activities.

Article 26 (Measures to Protect Smart Grid Information, etc.)

- (1) Smart grid business operators shall take the following protective measures in order to ensure the reliability and safety of smart grid information:
 1. Technological and physical protection measures, such as the installation and operation of an information protection system for preventing and coping with electronic intrusions under subparagraph 2 of Article 2 of the Act on the Protection of Information and Communications Infrastructure;
 2. Technological protection measures to prevent illegal leakage, alteration, and deletion of smart grid information;
 3. Administrative protection measures, such as the securing of organizations and human resources for protecting smart grid information and the establishment and implementation of plans therefor.
- (2) No smart grid business operator nor any person who is or was engaged in any business relating to a smart grid shall divulge to a third party confidential information acquired in connection with his/her duties.
- (3) The Minister of Knowledge Economy shall consult with the heads of related central administrative agencies to establish and publicize guidelines for the protective measures under paragraph (1) and may recommend smart grid business operators to comply with the guidelines.

Article 27 (Inspection on Performance, etc. of Information Protection Guidelines)

- (1) The Minister of Knowledge Economy may, every year, conduct an inspection on any of the following smart grid business operators to make sure that it complies with the guidelines under Article 26 (3):
 1. A business operator engaged in the construction of infrastructure for smart grids;
 2. A smart grid service provider who meets the standards, including standard for the number of users, as prescribed by Presidential Decree.
- (2) If necessary to verify whether a person meets the requirements under paragraph (1) 2, the Minister of Knowledge Economy may request a related administrative agency, an agency that holds relevant data, or a smart grid business operator to furnish him/her with

necessary data or to confirm relevant information.

- (3) If necessary as a result of a compliance inspection under paragraph (1), the Minister of Knowledge Economy may recommend improvements, issue an order to make improvements, or give an instruction as necessary with a period specified for the compliance.
- (4) Necessary matters concerning the procedure for an inspection on compliance with the guidelines under paragraph (1) shall be prescribed by Presidential Decree.

Article 28 (Ensuring Interoperability of Smart Grids)

If necessary to ensure the interoperability of smart grids, the Minister of Knowledge Economy may recommend smart grid business operators to establish a cooperation system between them with regard to the following matters:

1. Compatibility of smart grid instruments and products;
2. Sharing of smart grid information;
3. Inter-working between smart grids and smart grid services.

Article 29 (Prohibition of Intrusions, etc. into Smart Grids)

No one shall commit any of the following acts:

1. Intrusion into a smart grid without any right of access or beyond a permitted limit of access;
2. Fabrication, destruction, concealment, or disclosure of smart grid information without a justifiable cause;
3. Infusion of a malicious program (referring to a program that is likely to obstruct the stable operation of a power grid, such as a computer virus) into a smart grid with intent to obstruct the operation of the smart grid;
4. Generation of an error in processing smart grid information by sending a large amount of signals at once or by forcing to process an illegal command with intent to obstruct the operation of a smart grid.

Article 30 (Compensation for Damage)

If a smart grid business operator violates any provision of this Chapter in connection with the collection, processing, or utilization of smart grid information and consequently inflicts damage on any other person, he/she shall be liable for such damage: Provided, That the foregoing shall not apply to cases where it is proved that such damage has not been caused by an intentional act or negligence of the smart grid

business operator.

CHAPTER V SUPPLEMENTARY PROVISIONS

Article 31 (Submission of Data, etc.)

If necessary to establish a master plan or an implementation plan and to establish and facilitate the use of smart grids, the Minister of Knowledge Economy may request a related central administrative agency, a local government, or a corporation, an organization or an agency that participates in a smart grid project to submit data as necessary.

Article 32 (Fees)

Any person who intends to obtain certification under Article 15 shall pay fees, as prescribed by Presidential Decree.

Article 33 (Hearings)

If the Minister of Knowledge Economy intends to make any of the following dispositions, he/she shall hold a hearing:

1. Revocation of the registration of a smart grid business operator under Article 13;
2. Revocation of certification under Article 15 (3);
3. Revocation of the designation of a certification agency under Article 16 (2).

Article 34 (Delegation of Authority)

The Minister of Knowledge Economy may delegate part of his/her authority under this Act to the heads of affiliated agencies or the heads of local governments, as prescribed by Presidential Decree.

Article 35 (Entrustment of Business Affairs)

The Minister of Knowledge Economy may partly entrust institutions or organizations relating to smart grids with the business affairs of the Minister of Knowledge Economy, as prescribed by Presidential Decree.

Article 36 (Legal Fiction of Public Officials in Application of Penal Provisions)

Any of the following persons shall be deemed a public official for the purpose of penal provisions under Articles 129 through 132 of the Criminal Act:

1. An executive or an employee of an assisting agency;
2. An executive or an employee of an institution or organization engaged in the business affairs entrusted by the Minister of Knowledge Economy pursuant to Article 35.

CHAPTER VI PENAL PROVISIONS

Article 37 (Penal Provisions)

A person who intrudes into a smart grid without any right of access, or beyond a permitted limit of access, in violation of subparagraph 1 of Article 29, shall be punished by imprisonment with prison labor for not more than ten years or by a fine not exceeding 50 million won.

Article 38 (Penal Provisions)

Any person who falls under any of the following subparagraphs shall be punished by imprisonment with prison labor for not more than five years or by a fine not exceeding 30 million won:

1. A person who collects or processes smart grid information without the consent of the person information, in violation of Article 22 (1);
2. A person who provides or shares smart grid information without the consent of the subject of information, in violation of Article 23 (2);
3. A person who provides a third party with smart grid information, or who uses smart grid information for any purpose other than that for which smart grid information is provided, in violation of Article 23 (3);
4. A person who divulges to a third party confidential information acquired in connection with his/her duties, in violation of Article 26 (2);
5. A person who fabricates, destroys, conceals, or divulges smart grid information without a justifiable cause, in violation of subparagraph 2 of Article 29;
6. A person who infuses a malicious program, in violation of subparagraph 3 of Article 29;
7. A person who generates an error in processing smart grid information, in violation of subparagraph 4 of Article 29.

Article 39 (Fines for Negligence)

- (1) A person who fails to take necessary measures in violation of Article 22 (3) shall be punished by a fine for negligence not exceeding 30 million won.

- (2) Any person who falls under any of the following subparagraphs shall be punished by a fine for negligence not exceeding ten million won:
1. A person who engages in a smart grid business operator without the registration under Article 12 (1);
 2. A person who fails to comply with an order or instruction for improvement under Article 27 (3).
- (3) Any person who falls under any of the following subparagraphs shall be punished by a fine for negligence not exceeding three million won:
1. A person who fails to file an alteration registration of a material fact in violation of Article 12 (2);
 2. A person who places a mark of certification or any similar mark, or who advertises that he/she has obtained the certification, without such certification, in violation of Article 15 (5).
- (4) Fines for negligence under paragraphs (1) through (3) shall be imposed and collected by the Minister of Knowledge Economy, as prescribed by Presidential Decree.

ADDENDUM

This Act shall enter into force six months after the date of its promulgation.