



# Korea Electrical Manufacturers Association



 **Korea Electrical Manufacturers Association**

 **Korea Electrical Industry Technology Research Association**

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<http://www.koema.or.kr>  
<http://www.keitra.or.kr>

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 **Korea Electrical Industry Technology Research Association**

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Korea Electrical Manufacturers Association (KOEMA) leading Korea's electrical industry will commit its utmost efforts to ensure the sustainable growth of Korea's electrical industry.



## Greetings

**Korea Electrical Manufacturers Association is the organization which was founded in 1990 under article of the Industrial Development Act to contribute to the promotion of Korea's electrical industry and the development of Korea's national economy.**

The number of members, which was only 117 at the time of foundation, has been increasing to over 220, ranging from the electrical industry to state-owned power companies and relevant Academic-Industrial authorities. In addition, KOEMA is growing as a foundation institution for Korea's electrical industry with communications and relationships with over 50 relevant organizations around the world.

Recently, Korea's electrical industry is suffering from difficulties attributable to the slump in the domestic economy and unlimited competition in the global market. Furthermore, it is expected that the entrance into free trade agreements with more countries will increase the pressure on the opening of Korea's electrical industry to foreigners.

Korea Electrical Manufacturers Association (KOEMA) and Korea Electrical Industry Technology Research Association (KEITRA) are therefore planning to establish a solid foundation for the communication and empathy with members by establishing a close cooperative system with relevant organizations including the government, state-owned power companies, research institutions, and academic community on a long term basis from a future-oriented perspective to achieve USD 40 billion exports by 2020 and enable Korea secure a position as one of the world's Top 5 players in the global electrical industry.

We promise that we will commit our utmost efforts to develop Korea's electrical industry as the main drive force for national growth. We also expect your continuous attention and support.

Thank you.

May 2015

Chairman **CHANG, SECHANG**

**Korea Electrical Manufacturers Association**  
**Korea Electrical Industry Technology Research Association**

## Objective and History

### Objective

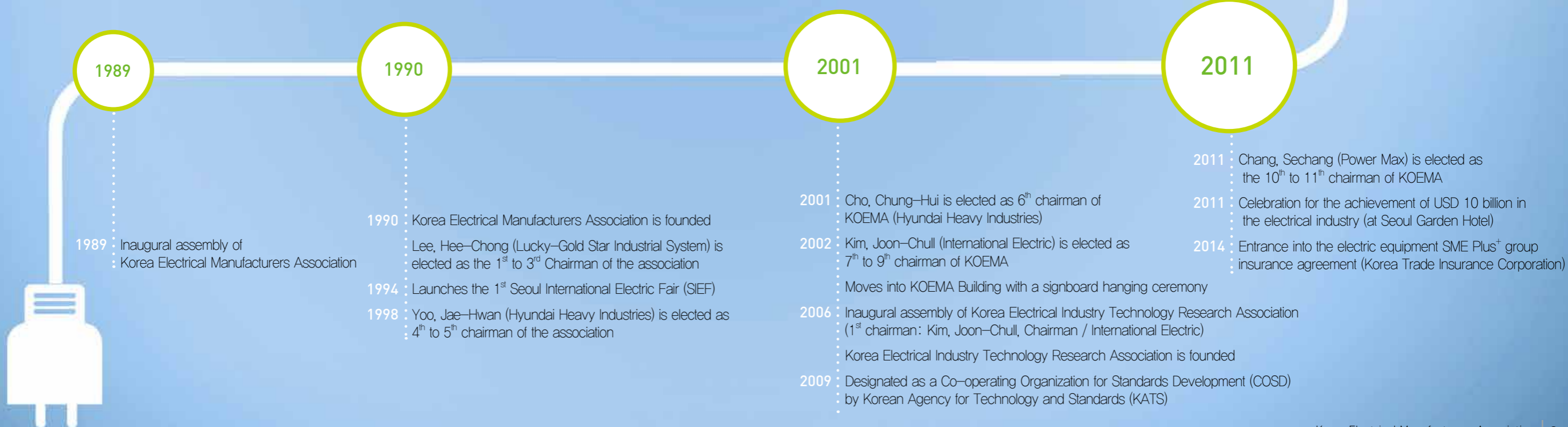
#### ➔ (Korea Electrical Manufacturers Association)

Efficiently performs projects intended to promote the electrical industry and seeks mutual friendship and common interests among members to contribute to the sound development of the electrical industry and development of the national economy.

#### ➔ (Korea Electrical Industry Technology Research Association)

Performs consultation and adjustment of activities related to the technical development sector such as research and development in the electrical industry and establishes a cooperative foundation among members to promote the sound development of the electrical industry.

### Company History

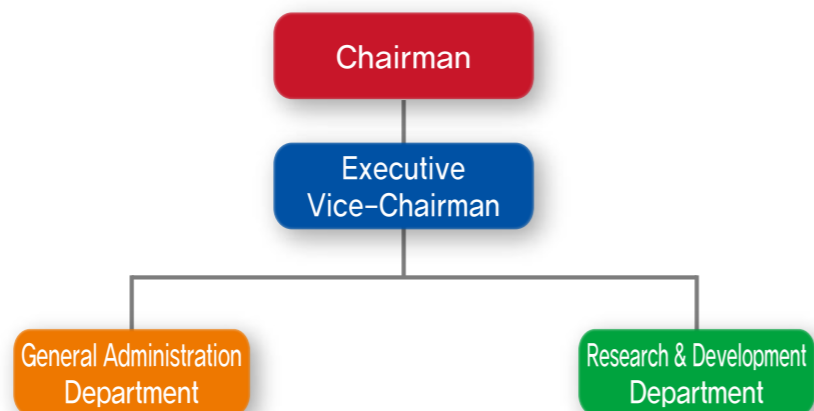


## Organization

 **Korea Electrical Manufacturers Association** ➔ [www.koema.or.kr](http://www.koema.or.kr)



 **Korea Electrical Industry Technology Research Association** ➔ [www.keitra.or.kr](http://www.keitra.or.kr)



## KOEMA Members



### Member Status

#### Large corporations

6 companies including Hyosung Corporation, Hyundai Heavy Industries, Ijin Electric, LS Cable & System, LS Industrial Systems, and Taihan Electric Wire

#### SMEs

215 companies including Kwang Myung Electric Engineering, Seondo Electric, and Vitzro Tech

#### Special members

6 power generation companies including KEPCO, Korea Hydro & Nuclear Power, and Korea South-East Power, as well as 16 institutions including the Korea Electrotechnology Research Institute, Korea Offshore Wind Power, and CIGRE Korea

### Qualifications of Members

#### Corporate members

- Regular Member: Company that is engaged in the operation of an electrical business or export/import of electrical products
  - member company, general company
- Special Member: Organization, government investment institution and/or academic association related to the electrical industry

#### Individual members



## Member Service

- ◆ **Real-time provision of electrical industry-related information**
  - Domestic and overseas electrical industry bid information (www.koema.or.kr)
  - News clipping via e-Newsletter and various related information service
  - Domestic and overseas electrical industry statistical information
  - Forecast of overseas and domestic electrical markets, government policy
- ◆ **Support for Academic-Industrial research and development planning**
  - Heavy electrical equipment development funds
  - Academic-Industrial mutual R&D planning and proposal to the government
  - National R&D Projects for large corporations and SMEs
  - Development of electrical equipment human resources
  - Launch of future power equipment technology conference
- ◆ **Participation in domestic and overseas exhibitions and support for overseas marketing**
  - Support for the market development team and provision of opportunities for participation in overseas exhibitions
    - Export Promotion Team: 100% support for consulting site rents, interpretation expenses, promotion expenses, etc.
    - Overseas Exhibitions: Up to 50% support for exhibition site rents, shipping costs, interpretation expenses, etc.
  - Preferential invitation and provision of opportunity to participate in export fairs
  - Discount of participation fee in Seoul International Electric Fair/Power Generation Korea
  - Loan support for the procurement of raw and subsidiary materials of exports
  - Support for the group entrance in an electrical equipment SME Plus+ insurance agreement
- ◆ **Proposal of the electrical industry development direction and establishment of required policies**
  - Plan for the development of the electrical industry and relevant policy
  - Analysis on the effect of FTA on the electrical industry and countermeasures
  - Conference between government officials and the industrial community
- ◆ **Enhancement of communication and relationships among members**
  - Launch of the board of directors meeting and regular assembly
  - Operates a council for each item (generator, switch gear, PLC)
  - Operates the large corporation council and the monthly member meeting
  - Operates KOEMA advisory committee and senior advisory committee
- ◆ **Support for quality control and standardization**
  - Operates the certified electrical equipment acceptance test exemption system
  - Operates a product liability fraternal insurance
  - Establishes and revises of international standards, national standards and organizational standards
  - Performs Co-operation Organization for Standards (COSD) activities
  - Performs IEC/TC57 secretary agency activities
- ◆ **Other member services**
  - Recommends people of merit in the electrical equipment industry
  - Develops and recommends the world's leading products in the electrical sector
  - Recommends tariff reductions in the electrical sector

## Major Activities



## Industry-Academia-Institute R&D Projects

### Promotion of SME's research and development activities and establishment of foundation for SME's self-sustainability

- ◆ **Financial support for the development of heavy electrical equipment**
  - Support: Up to KRW 500 million (KRW 1 billion for large scale project) of financial support/up to KRW 10 billion annually
  - Interest Rate: 2.5% annually
  - Period: 8 years (5 year installment payment with a 3 year grace period)
  - Bank: IBK, Hana Bank
- ◆ **Loan support for purchase of raw and subsidiary materials for exports**
  - Support: up to KRW 200 million
  - Interest Rate: 2.5% annually
  - Period: 3 years (2 year installment payment with a 1 year grace period)
  - Bank: IBK, Hana Bank
- ◆ **Support for electrical equipment SME export insurance premium**
  - Purpose: Relief of manufacturing (including installation) companies' financial risks from export activities
  - Support: Individual – KRW 5 million (annually) /  
Group – KRW 410 thousand (less than USD 3 million)
  - Competent organization: KEPCO, KOEMA
  - Service Provider: Korea Trade Insurance Corporation

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### Industry–Academia–Institute R&D mutual cooperative foundation establishment

- National Industry–Academia–Institute R&D Projects
  - Commercialization of export-oriented power equipment for mutual growth of large corporations and SMEs
  - Development of key smart power management semiconductor IC module for 100kVA class UPS
  - Development of intelligent energy power semiconductor IC for 60KW class energy storage system
  - Establishment of key R&BD road map for a growth engine in the heavy electrical equipment sector
  - Feasibility study on the export of low voltage micro-grid to Indonesia
  - Development of 250km/hr. class steel train track
  - Localization of movable car line system for cargo vessels (CY vessel)
- Industry–Academia–Institute technology development planning
  - Establishes a global specialist development strategy in the heavy electrical equipment sector
  - Establishes an R&D strategy in response to the international regulation on the electrical industry
  - Operates an electrical equipment technology committee
- Industry–Academia–Institute technical information exchange
  - Launches a future power equipment technology conference
  - Collects and distributes overseas electrical industry technology information
    - Support international Industry–Academia–Institute events
- Establishment of a cooperative system for the development of Academic–Industrial specialized human resources
  - Participates in the Korean Institute of Electrical Engineers human resource development center
  - Participates in basic and advanced human resource development projects from various universities
  - Participates in the Korea Electrical Engineering & Science Research Institute human resource development project

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### Promotion based Construction Projects for the development of future drive engine in the electrical sector

#### Basic direction

- Development of long term technologies and markets and establishment of technical foundation for the take-off of the electrical industry

#### Project sectors

- Electrical storage device business
  - Target: Establishes a foundation to preoccupy the future market to achieve the No. 2 spot in the global ESS market by 2020
  - Initiative: Operates a working level council for electrical storage devices
  - Implementation plan
    - Technology Development: Promotes Industry–Academia–Institute mutual technology development activities in the storage device and PCS sectors
    - System Improvement: Establishes an environment for the preoccupancy of future markets through the amendment of laws and systems
    - Market Development: Performs survey on basic information such as market, standards and patents, and shares information in the industrial community
- DC power distribution industry
  - Target: Establishes a foundation for taking the No. 1 spot in the global DC electrical power distribution equipment technology sector
  - Initiative: Operates a working level council for DC electrical power distribution equipment
  - Implementation plan
    - Technology Development: Establishes a short term technology development road map for the DC power distribution business (promotes mutual technology development between customers and partner companies)
    - Standardization and Human Resources Development: Establishes standards, supports international standardization activities, and prepares a plan to develop specialized human resources
    - Distribution and Proliferation: Distributes and encourages proliferation through the establishment of domestic laws and systems as well as promotes overseas demonstration projects

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## Quality Management and Standardization

### Enhancement of productivity and quality management in the electrical device manufacturing industry

- ▶ Operates the certified electrical equipment acceptance test exemption system
  - Ground: Ministry of Trade, Industry, and Energy Notification No. 2015-65 (March 3, 2015)
  - Target: Transformers, circuit breakers, switches, fuses, transformers, protection relays, lightning protection cable connectors, etc. (8 items)
  - Effects
    - Reinforcement of the manufacturer's quality competitiveness
    - Enhanced productivity and timely delivery through the reduction of test waiting period
    - Reduction of logistics costs and test expenses (85% of test fee from a certified testing institution)
- ▶ Operation of verification and judgment system for heavy electrical equipment not produced in Korea
  - Ground
    - Korea Electrical Safety Corporation's procedures for inspection activities (November 21, 2006)
    - Regulations for verification of heavy electrical equipment not produced in Korea (August 10, 2007)
  - Target: When there are no domestic production records or production is not appropriate
  - Effects: Prevents the indiscriminate import of heavy electrical equipment, and facilitates the operation of domestic industrial facilities



### Distribution and proliferation of standards through the establishment and revision of standards

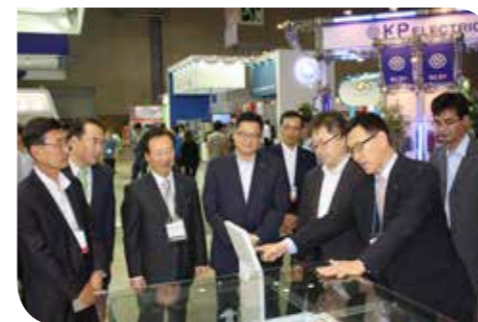
- ▶ Standardization activities
  - Management and operation of KOEMA Collective standards
  - Co-operating Organization for Standards Development (COSD) activities
  - IEC/TC57 (power systems and information operations) secretary agency activities
- ▶ Performance of national standard development project
  - Develops the international standards for the standard verification and evaluation method for the exchange of information between IEC61850 and Modbus



### Supports stable sales activities through the operation of domestic and overseas PL insurance

- ▶ Operation of product liability fraternal insurance
  - Support for overseas PL insurance
  - PL counseling and follow-up management support

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## Seoul International Electric Fair (SIEF)

The national infrastructure brand exhibition for "Convergence & Open Collaboration" inter-proximity power equipment industry ([www.sief.co.kr](http://www.sief.co.kr))

- ▶ Basic direction
  - The national infrastructure brand exhibition converged power equipments
    - Transmission, distribution, power generation, nuclear power, railway power, LED industry, electric wires
  - Exhibition of creative mutual growth between the customers and suppliers of power equipment
    - Mutual sponsorship and support for participants by KEPCO
  - Power equipment export and technology trade exhibition
    - Establishment of export infrastructure focusing on emerging economies such as Latin America, Africa, and CIS
  - Exhibition of eco-friendly IT convergence high efficiency technologies and products
- ▶ Period and Venue
  - October 20 (Tue) to 22 (Thu), 2015, (3 days) at Hall C, COEX
- ▶ Scale: 10,348m<sup>2</sup>
- ▶ Host and Organizer
  - Host: Ministry of Trade, Industry and Energy of Korea
  - Organizer: Korea Electrical Manufacturers Association
- ▶ Subsidiary events
  - One on One meeting with overseas buyers
  - Electrical accident prevention conference
  - ESS seminar
  - HVDC conference
  - Power generation conference
  - Awards and reception for contributors to electrical equipment export
  - Seminar of new technologies from advanced overseas companies
  - Procurement fair for state-owned power generation companies
- ▶ Integrated exhibitions
  - Korea Smart Grid Expo 2015
  - Inter-battery 2015
  - Power Generation Korea 2015

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## Export promotion and international cooperation

Overcoming of sluggish domestic sales and response to diversification of overseas markets

Establishment of a strategy for the entrance into new markets commensurate with changes to the trade environment

Establishment of foundation for USD 40 billion exports by 2020



- ▶ Participation in overseas exhibitions
  - India International Electrical Industry Expo
  - Hannover Messe
  - JECA FAIR
  - Iran International Electricity Exhibition
  - US IEEE PES T&D
  - Malaysia 2015
  - Saudi Power
  - Expo 2015 Electrica Internacional
- ▶ Dispatch of Electrical Business Road Show
  - Southeast Asia Electrical Business Road Show
  - Latin America Electrical Business Road Show
  - Indonesia-Thailand Electrical Business Road Show
- ▶ International cooperative activities
  - Myanmar-Laos emerging country power industry market survey
  - Export industrialization in Latin America
  - Participation in Federation of Asian Electrical Manufacturers' Associations (FAEMA)
  - Power generation equipment export industrialization in Middle East region
- ▶ Entrance in MOUs with related overseas institutions
  - 44 institutions from 34 countries (as of May 2014)



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## Reinforcement of trade cooperation activities and establishment and operation of cooperative system

Enhancement of trade and cooperation for mutual growth between large corporations and SMEs

Contribution to reinforcement of competitiveness through mutual response to the government's policy

Reinforcement of relationships through facilitation of communication among member companies



- ▶ Organization and operation of overseas trade mutual growth council
  - Performs analysis on effect of trade issues and prepares countermeasures
- ▶ Countermeasures in response to the promotion of trade and proposal to the government
  - Proposal to the government for designation and permission for sensitive items (draft)
  - Collection and proliferation of domestic and overseas trends information

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- ▶ Support for mutual growth between large corporation and SMEs
  - Development of mutual businesses and response to mutual difficulties
  - Designation of businesses suitable for SMEs and long term competition items
  - Establishment of mutual growth paradigm and reinforcement of cooperation
- ▶ Operation of committee for each item
  - PLC committee
  - Generator committee
  - Switchgear committee

- ▶ Operation of large corporation council
  - Promotes regular information exchange and friendship with large corporation members
  - Seeking solutions for pending issues and cooperation

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- ▶ Operation of monthly meeting for member companies
  - Enhances members' understanding about the association's priority projects and improves participation through the relief of difficulties and requests
- ▶ Operation of an association development advisory committee and senior advisory committee
  - Seeks development plans through the identification of priority projects for 2020
  - Promotes the development of the association and the electrical industry by hearing the valuable experiences and opinions from seniors in the electrical industry and enhances external image

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**1. 2015년 1분기 수출입 총괄**  
 수출 36.1억달러(12.8%), 수입 29.8억달러(7.2%), 수지 3.0억달러(2.2%증가)  
 ※ 전년 수출 1,336억달러(-2.3%), 수입 1,120억달러(-15.4%)

구분	2015년 1분기			2014년 1분기			증감률	1월	2월	3월
	수출	수입	수지	수출	수입	수지				
전체	36.1	29.8	3.0	32.5	27.3	5.2	8.0	8.7	9.3	
중대형	13.4	8.4	5.0	12.0	7.5	4.5	7.5	8.0	8.5	
중소형	22.7	21.4	1.3	20.5	19.8	0.7	0.5	0.7	0.8	
전기부품	4.5	3.5	1.0	4.0	3.0	1.0	1.0	1.0	1.0	
중장비	8.9	4.9	4.0	8.0	4.0	4.0	6.5	7.0	7.5	
수출 (전체, 백만달러)	36100	29800	3000	32500	27300	5200	8000	8700	9300	
수입 (전체, 백만달러)	29800	29800	0	27300	27300	0	4000	4000	4000	
수지 (전체, 백만달러)	6300	0	6300	5200	0	5200	4000	4700	5300	
전기부품	4500	3500	1000	4000	3000	1000	1000	1000	1000	
중장비	4400	1400	3000	4000	1000	3000	5500	6000	6500	
수출	36100	29800	3000	32500	27300	5200	8000	8700	9300	

**2015년 1분기 수출입 품목별 실적**

구분	품목	수출액	수입액	수지
중대형	중대형 전기부품	1,200	800	400
	중대형 중장비	12,200	7,600	4,600
	중대형 기타	10,000	0	10,000
	중소형	24,600	21,400	3,200
	중소형 전기부품	4,500	3,500	1,000
	중소형 중장비	20,100	17,900	2,200
	중소형 기타	0	0	0
	전기부품	4,500	3,500	1,000
	중장비	13,400	8,400	5,000
	기타	18,200	17,900	300



## Statistical survey, Member support activities

### Provision of domestic and overseas electrical industry statistical survey

- ▶ Research efforts and analysis on monthly and quarterly export and import statistics
- ▶ Report on forecast of electrical industry market
  - www.koema.or.kr → Industrial information → Statistics
  - Forecast and statistical survey on major overseas electrical industry markets (such as Japan)
- ▶ Materials and parts statistics establishment project
  - 386 companies in the heavy electrical equipment and wires sectors
  - www.mctnet.or

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### Provision of domestic and overseas public institution bid information

- ▶ Domestic and overseas public institution (Public Procurement Service, etc.) bid information service
  - Posts the information on KOEMA's website (dedicated for corporate members)

### Rewards for contributors to the development and exports of electrical equipment industry

- ▶ Rewards for contributors to the development and of domestic electrical equipment industry
  - Identifies and rewards contributors to the development the electrical industry and related competitiveness, such as development of technologies and expansion of exports
- ▶ Management of KOEMA's website
  - KOEMA's e-newsletter service, website management, etc.
- ▶ Public relations as well as survey and research activities
  - Meeting with accredited reporters
  - Produces and distributes the member list and diary

▶ General Administration Department ☎ +82-2-581-8604

# Korea Electrical Manufacturers Association

## Guidance of member registration

– Related manufacturers of electrical equipment, wires, etc. –



## Benefits you will receive when you join the KOEMA ...

- ▶ Financial support for heavy electrical equipment technology development
- ▶ Support for entrance into the overseas market such as exports
- ▶ Discount of Seoul International Electric Fair (SIEF) participation fee
- ▶ Exempted from the certified testing institution's acceptance test on heavy electrical equipment
- ▶ Participates in the establishment and revision of international standards, national standards, and organizational standards
- ▶ Participates in the development of industrial electric technologies including national research activities
  - Automatic registration in Korea Electrical Industry Technology Research Association (KEITRA) as a member without separate membership dues
- ▶ Provided with domestic and overseas electrical industry and market information
- ▶ Able to efficiently appeal to domestic and overseas buyers for products from member companies
- ▶ Able to be recommended as a nominee for government reward in return for contribution to the development of electrical industry
- ▶ Other: Provided with PL exemption business information as well as domestic and overseas bid information



### For applications and inquiries: General Administration Department

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- E-mail : leeick@koema.or.kr

