Korea Meteorological Institute

Weather, the Wind of Industry



Introduction

Budget



Korea Meteorological Institute

President Ahn Young-in

Location 135, Tongil-ro, Seodaemun-gu, Seoul, Korea

Legal Foundation Article 17 of Weather Industry Promotion Act

Homepage http://www.kmiti.or.kr

5 billion won ('22)

Cultivating
Meteorological
Industry
12.8 billion won
Network
30.5 billion won

Research and Development 26.1 billion won

International Cooperation, etc. 8.1 billion won **Number of Employees**

174 ('22. 3.)







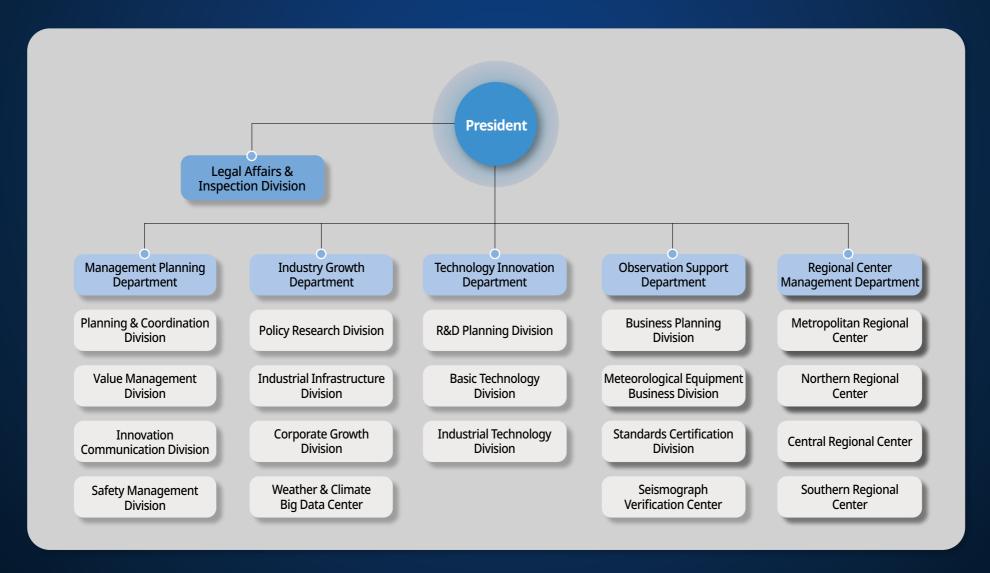
History











Mission & Vision





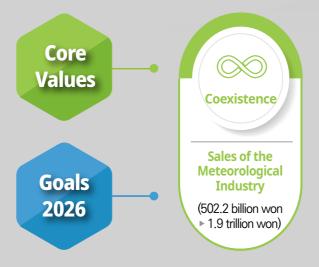
MISSION

Promoting the Meteorological Industry and the Use of Weather Information



VISION

An institution specializing in meteorological technology that contributes to the innovative growth of the meteorological industry and improvement in the public interest









Strategic Goals and Tasks



Strategic Goals

Pioneering Innovative Growth in the Meteorological Industry Propagating Future Values Related to the Weather and Climate Reinforcing Social Responsibility on a National Level

7

Pioneer Meteorological Industry Policies and R&D Develop and Propagate Weather and Climate-related Equipment Technology Promote Win-Win Cooperation with Customers

Strategic Tasks Cultivate Future Experts and Talent for the Weather and Climate Industry Enhance Usability of Weather and Climate-related Big Data Build Public Confidence and Practice Ethical Management

Provide Life-cycle Growth Support Customized for the Meteorological Industry

Discover Sustainable Jobs for the Future

Establish a Sustainable Management System



Business Introduction









Policy Implication in Meteorological Industry

Survey on current status of meteorological industry and provide basic information for policy implication

Meteorological Industry Status Survey and Analysis

Contents

Providing sales, number of employees and export of meteorological industry annually through the national statistics

Publication of the Weather and Climate Industry Policy Papers

Contents

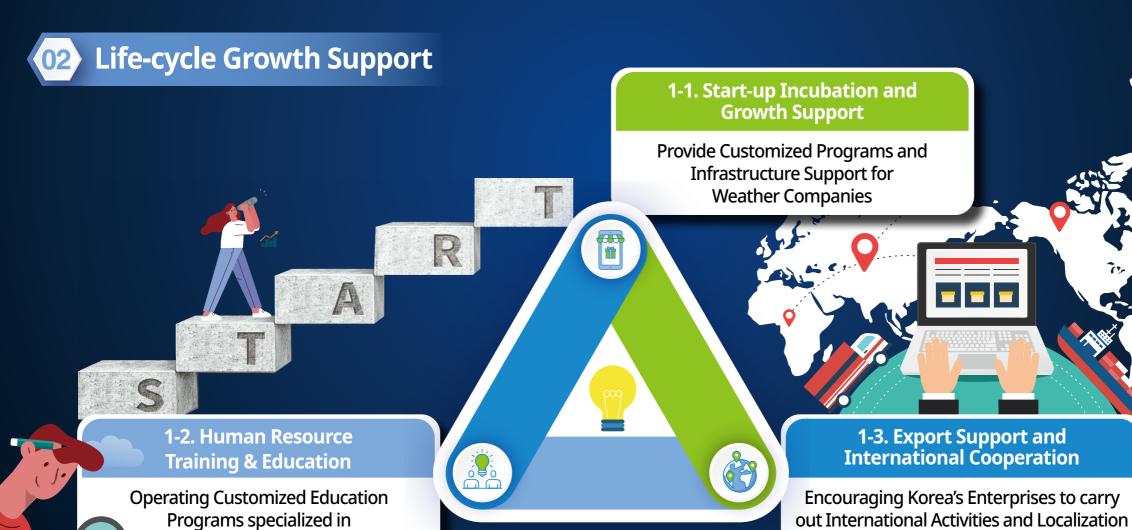
Publication of weather and climate industry policy papers called 'issue paper' that analyze trends and policies of meteorological Industry quarterly





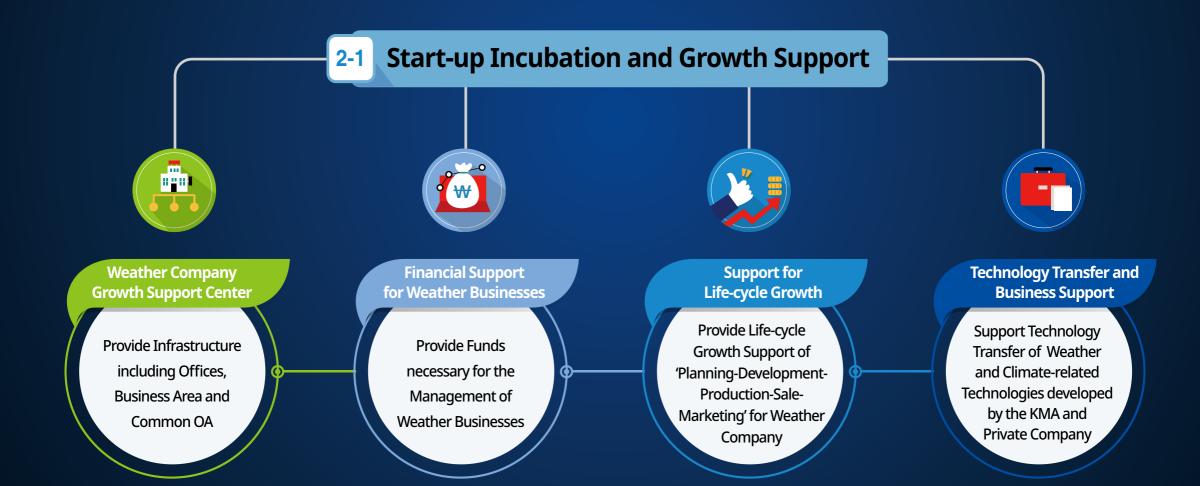
Weather and Climate Industry





of Meteorological Technologies









Human Resource Training & Education

National Human Resource Development Consortium

Competency Reinforcement Education Program for Employees in Meteorological Industry



An employment insurance subscribers interested in meteorological field, Employees of small and medium sized weather companies and related industries



Education programs for skill improvement of employees in meteorological industry

Education for Meteorological License

Education Program for Weather Forecast License and Meteorological Phenomenon License Holders



A person who intends to obtain a meteorological license after meteorological qualification



Article 9 and article 13 of the enforcement rules of the Meteorological Industry Promotion Act

Weather Management Consultant Training

Training of Weather Management Consultant to Promote Weather Management



Experienced person in meteorological and business consulting field, Weather forecast license or meteorological phenomenon license holders



Weather management introduction, Big data in meteorological industry

Education for Meteorological Instrument

Education to Improve Meteorological Instrument Maintenance and Repair Skills



Workers of meteorological instrument maintenance companies and related industries



Meteorological instrument introduction, AWS checking and troubleshooting, etc.



International Meteorological Expert Training Program

Practical Education and Training Program for Human Resources who will take part in International Organizations



Grad students majoring in weather and climate or international business



Education(4weeks), International organization internship

Graduate School Project for Convergence of Data

Education for Experts to
Enhance the Utilization of Weather and
Climate Data



Graduate school that can operate weather-related master's and doctorate courses



Personnel expenses, facility expenses, research expenses, scholarships, etc.





2-3

Export Support and International Cooperation

Global Marketing Support Program

Support Small and Medium-sized Enterprises' Global Marketing in the Meteorological Industry

Target

Small and medium-sized weather company

Contents

Marketing support including international technical certification and patent, inviting buyers, and supporting overseas PR activities

Support for the Participation in Meteorological Expo

Introduce Korean Meteorological Instrument and Technology by Support for Participation in International Expo

Targe

Small and medium-sized weather company

Contents

Support for registration fees, interpretation fees, PR materials, and booth expenses for participation

International Meteorological Project Development

Developing International Meteorological Projects based on Partner Countries' Needs

Target

Organizations with international cooperation and convergence system for meteorological industry and related field

Contents

Support for pre-planning(Phase1) and detailed-planning(Phase2) costs

Official Development Assistance(ODA) Projects

Support Developing Country's Climate Change Response by Conducting ODA Projects

Country

Laos, Cambodia, Philippines, Mongolia

Contents

Installation of the Automated Weather Observation System, Global training program







Raising Awareness of the Weather and Climate Industry

Support the use of weather information to revitalize the meteorological industry and raise national awareness

Promote Weather Management

Provide integrated support of weather and management to improve the productivity of companies and spread the economic values of weather information

Mid to Long Term Weather Management Strategy

Weather Effects and Applications





Set the Strategic Weather Impact Analysis







Build the Data Acquisition





Management Plan

Weather Management

Follow-up Management

Revitalize Weather and Climate Industry

Support discovery of new markets, raising national awareness and promotion of meteorological industry in Korea with the participation of companies and people













Enhance Usability of Weather and Climate-related Big Data

Promote the use of weather information by operating a big data platform and providing customized weather information



Big Data Platform for Meteorological Industry



National Integrated Data Map





(FTP Transmission → Platform Transaction)

Expand Data Customer Demand

(Weather company → Data company)



Enhance Data Quality
(Quality Certification, Analysis of Private Data)



Utilization and Dissemination of data
(Data Convergence)



Weather Company

(Technical Collaboration between Data Producers and Operators)



Artificial Intelligence Hub
NIPA/AI Voucher



Public Data Portal





R&D Planning

Contribute to the development of weather technology and the improvement of research quality through R&D management

1. R&D Planning

Research and Development on National Issues such as Carbon Neutrality and Energy



4. Publication of Research and Analysis Report

Publication of R&D Trend Analysis Report related

to Meteorological Industry

2. Technology Demand Survey

Finding R&D Tasks based on Research on Technology Demand for Industry, Research Institutes, Academia and Public

3. Expert Forums for Project Planning

Excellence

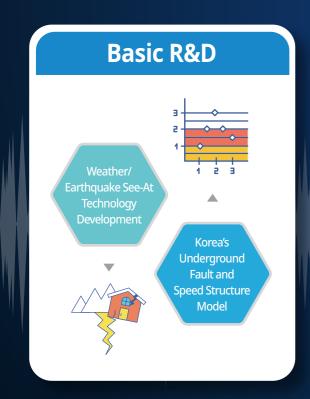
Finding New R&D Agenda through Presentation and Discussion by Experts in the Field of Meteorological Industry, Academia, and Research

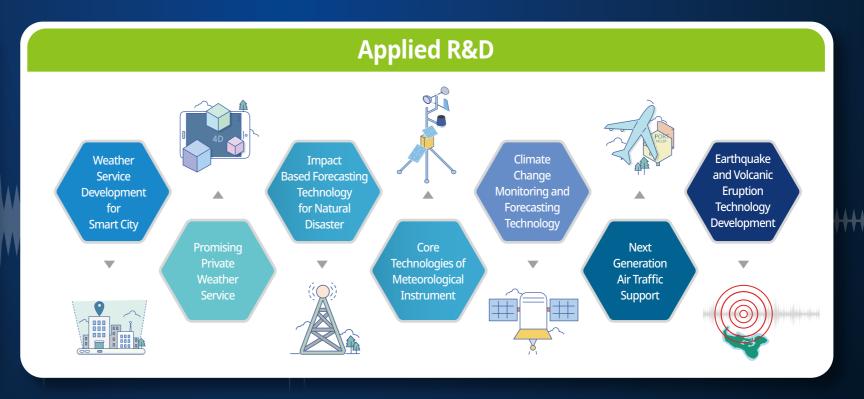






Contribute to the innovation of meteorological technology through the weather and climate R&D project









Operate National Observation Network

Provide basic weather forecast data via hi-tech meteorological instrument

Maintenance and Operation of the Instrument

Improvement of the national observation network by maintenance and operation of the meteorological instrument

Surface Observation Instrument

Automatic Weather Station(AWS)



Automated Synoptic Observing System(AWS)



Measurement of weather elements including pressure, temperature, humidity, wind, solar radiation, etc.

Marine Observation Instrument

Ocean Data Buoy



Coastal Wave Buoy



Measurement of weather elements including wind speed & direction, air temperature, wave height, wave period, wave direction, etc.

Technical Guidance on Meteorological Instrument

Provide technical guidance on how to operate and manage the meteorological instrument in cooperation with local governments, public agencies







Certification and Verification

Determine suitability of monitoring systems by verifying the performance of meteorological instrument

Meteorological Instrument Certification

Certify meteorological companies by examining the standard performances of meteorological devices, evaluating the ability in quality management, and delivery execution performance

Meteorological Instrument Verification

Verification for companies that intend to manufacture, import or install meteorological instrument to determine whether their performance is maintained as certificated

Certification and Verification

Category	Certification	Verification
Purpose	Determination of reliability of meteorological devices through performance, structure, certification, etc	Maintenance of the accuracy of meteorological instrument
Contents	Structure inspection, Performance(accuracy), Durability, Stability(data collection)	Structure inspection, Performance (indoor/field), *Confirmation of maintenance of certification
Method	1 time per product(model)	Total inspection







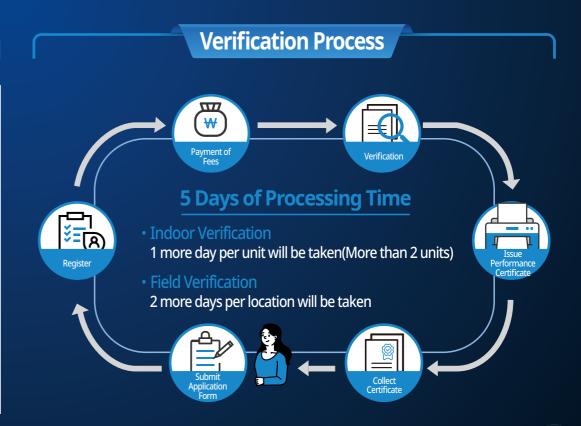




Seismic Instrument Verification

Performance evaluation and verification to improve the accuracy of seismic observation data

Verification • Determination of suitability through performance, structure, and functional inspection of seismic instrument • Regular and occasional verification to maintain accuracy of seismic instrument **Target** Accelerometer sensors, seismometer sensors, seismic recorders Verification 5 years Cycle • Instrument calibrated by a representative agency of national measurement **Exemptions** standards or and an agency of national calibration • Instrument qualified by an authorized organization Indoor verification: Verification of the KMI with the verification instrument **Category** Field verification: Verification with mobile verification instrument at the place where seismic instrument is installed K-test bed Support for localization of seismic instrument by operating K-test bed









Standardization of Meteorological Observation Technology

Improvement of observation quality of meteorological instrument by international standardization

Contents

Development of standards and operation of systems for establishing and revising national and international standards in the fields of meteorology and solar energy



Category	Contents
International Standardization of Domestic Technology(ISO)	Analysis of international standard in meteorology, development of international standards for meteorological and solar energy field
Establishing and Expanding National Standards(KS)	Development of KS for establishment of criteria for technology in meteorology



THANK YOU

