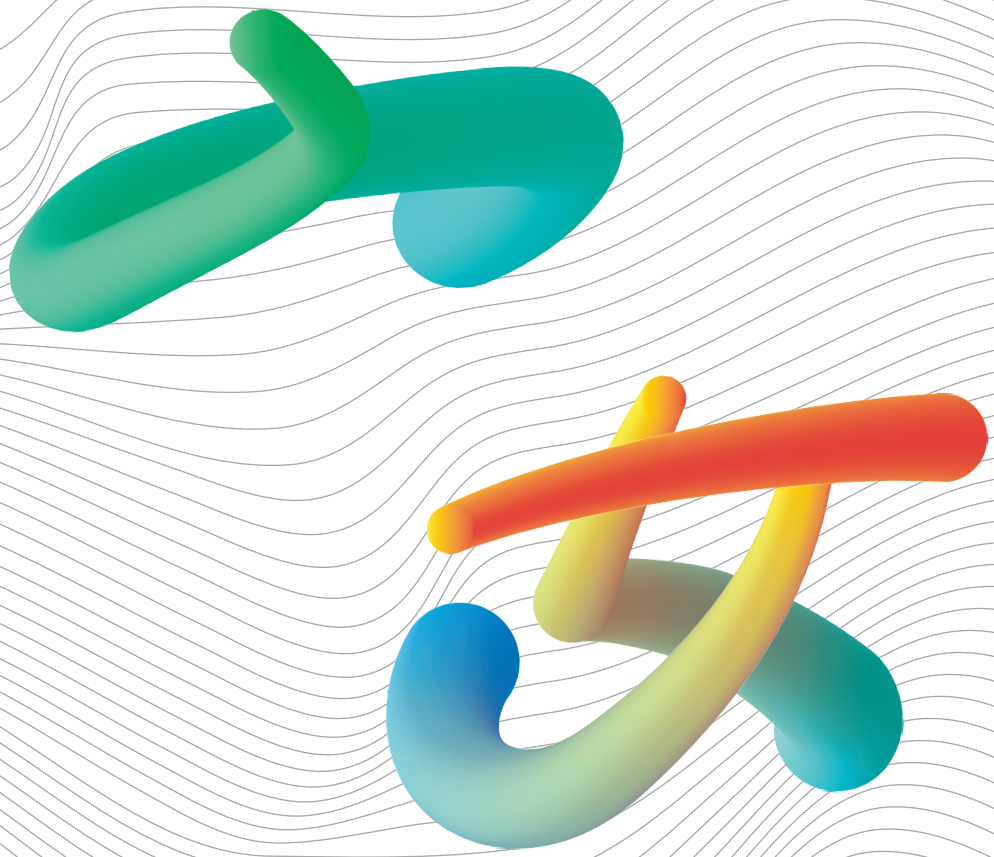
2021

Annual Report of BSMI

More Secure & Safer Life

BSMI

More Secure & Safer Life



安：字上部是「宀」部件，表示與房屋有關，下部是「女」部件，全字表示女子安然坐於屋中，有安靜、安全、安逸的意思。

安 (pronounced as /ān/ with the form  in ancient Chinese) is composed of "宀" (house) and "女" (woman), a woman sitting in a house, meaning "safe and secure."

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Foreword from the Director General

The global economic and social activities in 2021 continually confronted a comprehensive transformation following the COVID-19 pandemic, which required the government to respond to the new challenges quickly with innovative approaches. In addition to the important tasks of developing national standards, maintaining legal metrology system, ensuring safety of commodities and monitoring the quality of COVID-19 prevention materials, the BSMI was also dedicated to establishing inspection techniques and standards for emerging technologies, such as energy storage, 5G, and EV chargers. I am honored that my colleagues, who put considerable efforts in many areas, have achieved a high level of performance.

In respect of standardization, 193 national standards were developed and updated mainly in the fields of electric vehicles, smart machinery technology, chemical industry, information and telecommunication equipment, and consumer products to facilitate the sustainable development of the industry and protect the rights of consumers.

To support industry competitiveness, the National Measurement Laboratory (NML) has developed nanoparticle concentration measurement technology to satisfy the demand for particle pollutant detection of raw materials during semiconductor manufacturing processes. Moreover, technical specification for A/L measuring instruments was adopted to ensure the credibility of law enforcement and to manage air quality for the purpose of environment protection.

With the rising awareness of consumer product safety, 4 new products were included in the scope of mandatory inspection, such as charging and battery swap equipment for electric motorcycles, and 21 technical regulations were adopted or revised to protect consumer from potential hazards. To facilitate the deployment and safety of 5G smart poles, efforts were devoted in developing its inspection standards and certification scheme.

Apart from the quality infrastructure area, the BSMI is devoted to promoting Taiwan Renewable Energy Certificates (T-REC) and their trading. From 2017 to 2021, 226 T-REC renewable facilities were registered in T-REC Center, with a total installed capacity of 473 MW and a total issuance of 958,176 T-RECs (equivalent to a reduction of 534,361 metric tons of carbon emission). T-REC Center has completed 794 transactions, with 827,445 T-RECs transferred.

At international level, despite the pandemic-related travel restrictions, the BSMI actively participated in international organizations activities and promoted bilateral communication and cooperation with counterpart organizations abroad via virtual meetings. The BSMI strengthened the relationship with our partners through several capacity building programs and information exchange meetings. An Agreement on Technical Cooperation was signed with INTN of Paraguay to deepen regulatory cooperation and trade facilitation.

Moving into the post-pandemic era, the BSMI will continue working towards its mission to lead the development of industry and safeguard the interests of consumers in Taiwan by keeping pace with technology advances and aligning with international practices.

Ching-chang Lien

BSMI OVERVIEW

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Who We Are

The Bureau of Standards, Metrology and Inspection (BSMI) under the Ministry of Economic Affairs (MOEA) is the authority responsible for standardization, metrology and consumer product safety in Taiwan.

What We Do

Guided by the philosophy of “Innovative Thinking, Proactive Service and International Connection,” we follow good practices that encourage innovation of technology, provide adequate protection for the public, and facilitate trade by eliminating technical barriers to trade.

Key functions of our services are as follows:
-Developing and maintaining national standards and national measurement standards;
-Regulating and monitoring safety of products, mainly industrial and consumer products;
-Providing testing and certification services; and
-Cooperating with corresponding authorities or organizations of trading partners.

MOEA

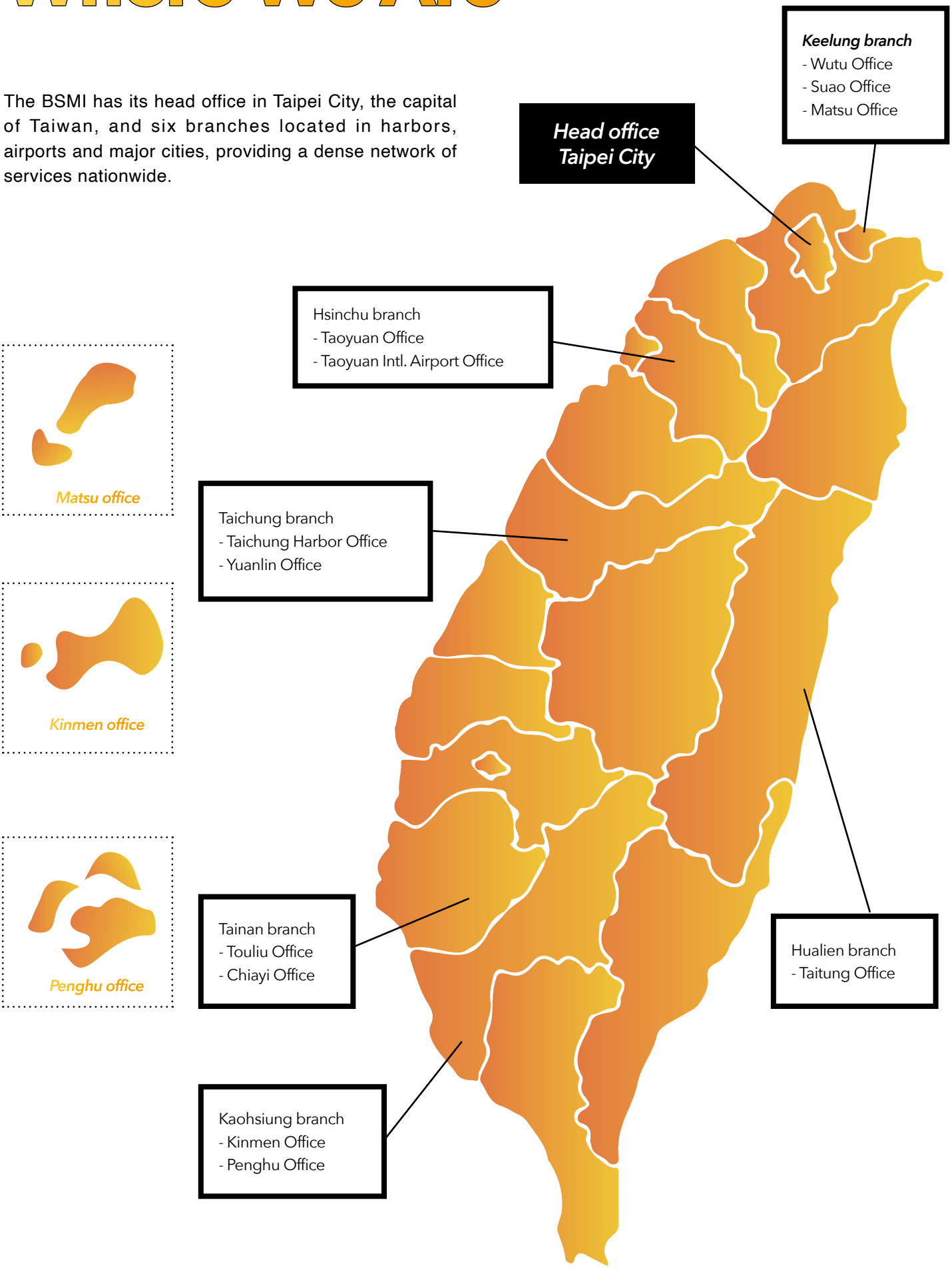
BSMI

- *STANDARDS*
- *METROLOGY*
- *PRODUCT SAFETY*
- *TESTING & CERTIFICATION*
- *INTERNATIONAL COOPERATION*

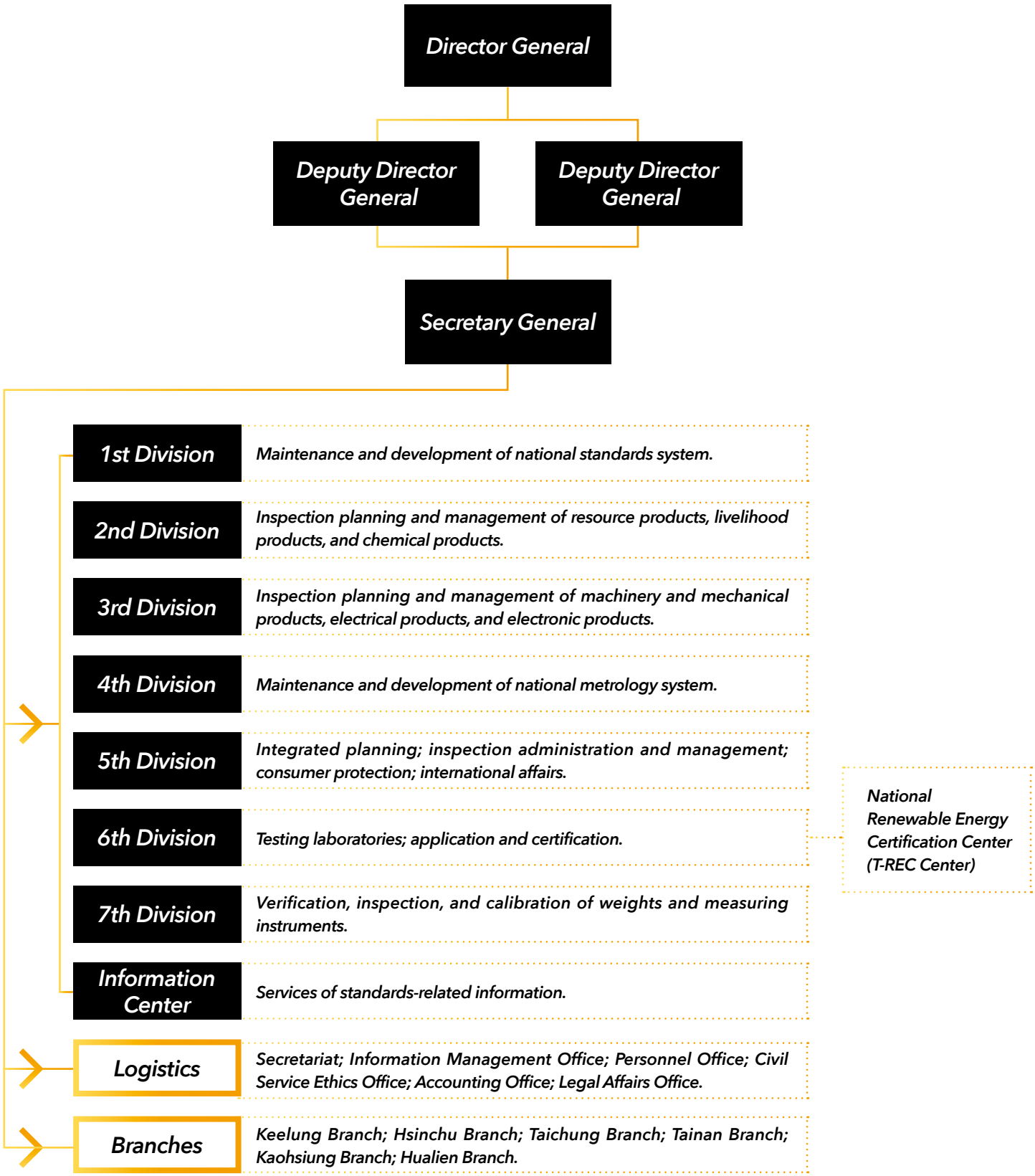
- *Encouraging innovation of technology;*
- *Providing adequate protection of the public;*
- *Eliminating technical barriers to trade.*

Where We Are

The BSMI has its head office in Taipei City, the capital of Taiwan, and six branches located in harbors, airports and major cities, providing a dense network of services nationwide.



Organization Chart by Activities



Budget and Manpower

Annual Income Budget

Categories	Amount (Units: NTD 1,000)	Percentage
Fines & Compensation	18,640	1.84
Charges & Fees	983,985	96.87
Properties	4,629	0.45
Others	8,496	0.84
Total	**1,015,750**	**100.00**

Annual Expenditure Budget

Categories	Amount (Units: NTD 1,000)	Percentage
Development of Measuring and Standards	560,602	24.35
General Administration	1,262,399	54.84
Inspection and Metrological Management	466,834	20.28
Construction	11,996	0.52
Transportation and Relative Equipment	222	0.01
Total	**2,302,053**	**100.00**

Age Distribution of Personnel

Age	Persons	Percentage
20~29	39	4.74
30~39	157	19.10
40~49	240	29.20
50~59	325	39.54
60+	61	7.42
Total	**822**	**100.00**

Distribution of Education Background of Personnel

Categories	Persons	Percentage
Graduate School	468	56.93
University	270	32.85
College	79	9.61
Senior High School and Vocational School	5	0.61
Total	**822**	**100.00**

ACTIONS OF THE YEAR

ACTIONS OF THE YEAR

Action of the year

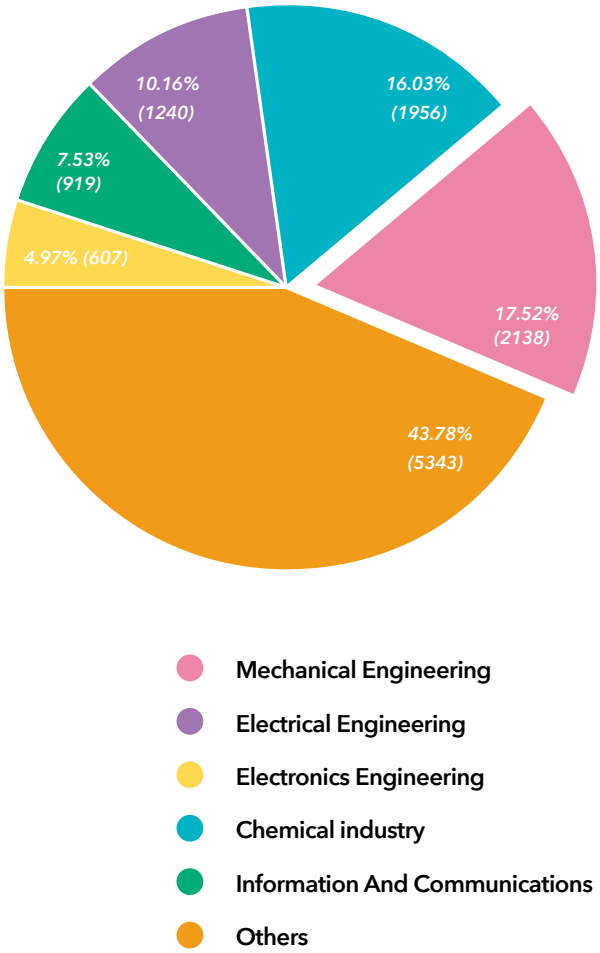
Standards

Being the national standards body in Taiwan, the BSMI bears the responsibility of developing and operating a standardization system that can effectively respond to regulatory and market needs, as well as keeps pace with scientific and technological development. Bringing national standards highly in line with international ones not only ensures compatibility and consistency of technical regulations, but also supports the advancement of industry and uplift the living quality of the society.

1. Brief on National Standards

This year, we established 118 new standards, revised 75 standards, and withdrew 58 standards, which resulted in a total of 12,203 CNS in existence by the end of 2021. New standards mainly involve sectors of electrical engineering, chemical industry, information and telecommunication equipment, and consumer products. Besides, national standards (CNS) were adopted or revised to provide up-to-date guidelines, such as those in electric vehicles, environmental management and smart machinery in response to the national policies, mainly the "5+2 Industrial Innovation Plan." The chart below shows the top 5 sectors and their proportions in the total number of CNS. For the numbers of CNS standards in different sectors please refer to Table 1.

▼ *Chart 1- Composition of CNS by the end of 2021*



2. Alignment of CNS with International Standards

Among the 12,203 CNS, 99% of them are harmonized with international standards when relevant international standards exist.

3. CNS Referenced in Technical Regulations

The number of CNS referenced in technical regulations was 1,124, most of which belong to the categories of electrical engineering, mechanical engineering, civil engineering and chemical industry.

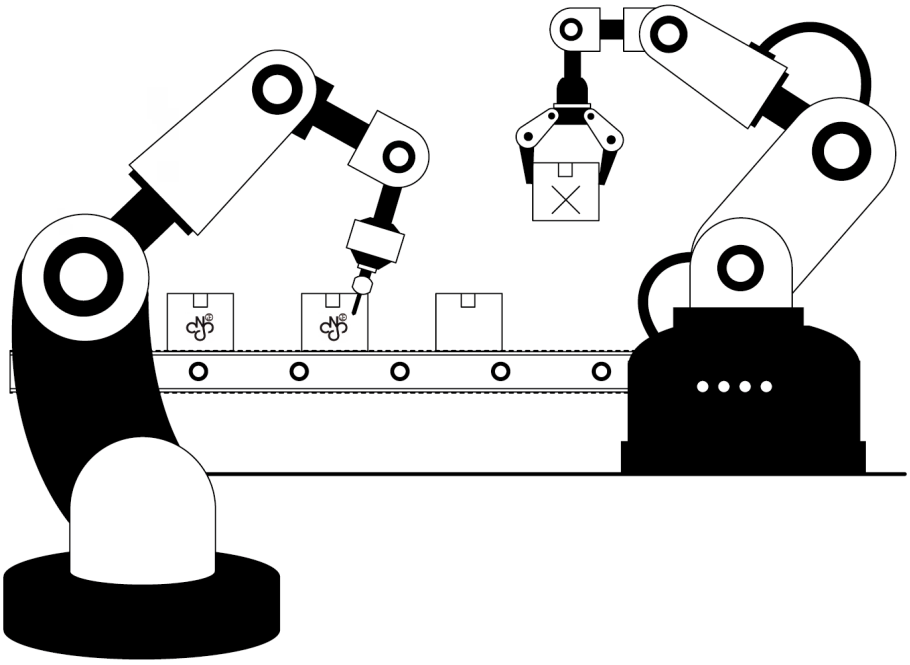
Updated CNS Standards can be accessed at the CNS Online Service.
https://www.cnsonline.com.tw/?locale=en_US

4. CNS Promotion Activities

To promote the use of and adherence to national standards, key initiatives of the BSMI are listed below.

· The CNS Mark is a voluntary product certification system in Taiwan to demonstrate that the quality of products and the quality management system of manufacturing factories comply with national standards. CNS Mark products may enjoy exemption from related testing under government procurement projects. A total of 1,975 products are granted to use CNS Mark by the end of 2021. For the categories of certified CNS Mark products and factories, please refer to Table 2.

▲ *Products Bearing CNS Mark*



· Seminars and monthly e-newsletters are important means of keeping the public regularly informed of the progress of CNS standards. In collaboration with related associations, we held seminars to introduce updates on national standards to encourage the use of such standards in the production processes and enhance the performance of the products, for example in the area of playground equipment. The number of participants of these events reached 300 in total. On the other hand, the e-newsletter covers topics that are fairly diverse but closely related to people's everyday lives and has been supported by the public ever since the first issue in 2011. Number of subscriptions had grown to 4,786

5. Stakeholder-Led Initiatives

Enhancement of Industry Participation in Standardization Activities

To encourage participation of the industry in the development of national standards and to develop human resources for private sectors, recognized standards development organizations (SDOs) are obliged to recommend drafts, submit comments, and attend technical committee meetings. In 2021, there were a total of 7 SDOs recognized by the BSMI.

Support of Industry Participation in International Standardization Activities

We continuously provide financial support to companies and associations for sending experts to attend meetings held by international and industrial standardizing organizations, including ISO/IEC JTC 1, 3GPP, and MPEG this year.

6. 2022 Work Plan for National Standards

The BSMI will continuously place emphasis on areas of green energy technologies, environmental protection, energy saving, smart machinery, public construction, and consumer and assistive products to guide scientific and technological development and social transformation.

Besides, as Artificial Intelligence (AI) and the 5th generation mobile networks (5G) become more ubiquitous, and the needs for international standards are increasing from industry, we are highly focusing on the global development of these two areas. Relevant national standards are under preparation in response to international development.

<Table 1>

Numbers of National Standards in 2021 (by categories)

Categories	*New*	*Revised*	*Withdrawn*	*Total*
Civil Engineering and Architecture	2	7	1	560
Mechanical Engineering	6	5	-	2138
Electrical Engineering	27	12	-	1240
Electronic Engineering	-	-	-	607
Motor Vehicles and Aerospace Engineering	10	-	-	479
Railway Engineering	-	-	-	106
Naval Architecture Engineering	-	-	-	354
Ferrous Materials and Metallurgy	-	2	-	312
Non-ferrous Materials and Metallurgy	-	-	-	236
Nuclear Engineering	-	-	-	-
Chemical Industry	10	11	8	1956
Textile Industry	11	1	-	390
Mining	-	-	-	82
Agriculture	-	3	-	331
Food	1	3	1	354
Wood Industry	1	2	-	85
Pulp and Paper Industry	-	3	2	190
Environmental Engineering and Management	1	5	-	54
Ceramic Industry	-	4	-	282
Consumer Products	13	6	11	341
Hygiene and Medical Appliances	5	3	-	258
Information and Communications	18	3	33	919
Industrial Safety	6	-	-	252
Quality Control	3	3	-	74
Logistics and Packaging	1	-	-	174
General and Other Areas	3	2	2	429
Total	***118***	***75***	***58***	***12,203***

<Table 2>

Numbers of CNS Mark Products & Factories by 2021

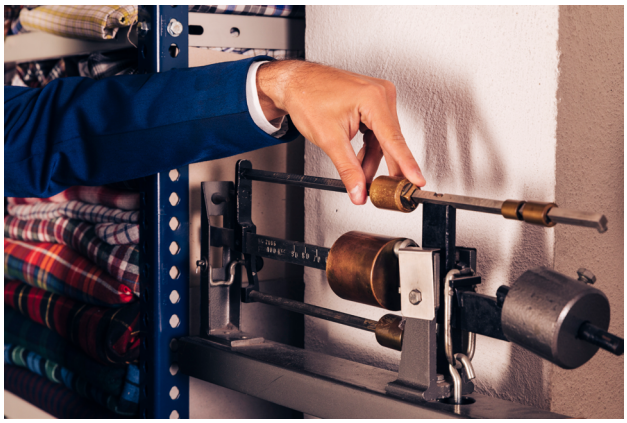
Categories	*Products*	*Factories*
Civil Engineering and Architecture	504	200
Mechanical Engineering	128	60
Electrical Engineering and Electronic Engineering	330	136
Motor Vehicles and Aerospace Engineering	13	8
Railway Engineering	0	0
Naval Architecture Engineering	0	0
Ferrous Materials and Metallurgy	183	70
Non-ferrous Materials and Metallurgy	5	4
Chemical Industry	325	96
Textile Industry	1	1
Mining	0	0
Agriculture and Food Products	0	0
Wood Industry	1	1
Pulp and Paper Industry	78	37
Ceramic Industry	308	90
Consumer Products	35	23
Hygiene and Medical Appliances	9	9
Industrial Safety, Packaging, General and Other Areas	55	26
Total	***1,975***	***672****

** It is not the sum of the above numbers because one factory may be certified for more than one product category.*

Action of the year

Metrology

Accuracy of the measuring instruments plays a vital role in protection of health, safety, the environment and consumers' rights, as well as in pursuit of quality and innovation for the industry. As stipulated in the Weights and Measures Act, the BSMI is responsible for the development of national metrology system in Taiwan. The national metrology system consists of legal metrology, compulsory in nature, and scientific metrology, which provides state-of-the-art service to stakeholders.



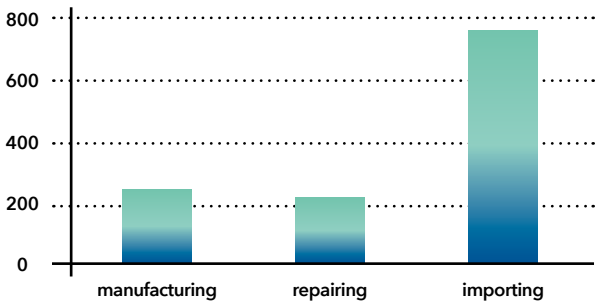
1. Legal Metrology

The legal metrology system is implemented by three layers of control, namely licensing of measuring instrument businesses, type-approval and verification. This three-layer control system is robust, resilient and adaptive in order to evolve and innovate with the rapid changing world. Besides the existing established legal metrology tasks, the BSMI launched a major project to introduce air to liquid volumetric ratio measuring instruments (A/L measuring instruments) into the legal control system in October 2021.

(1) Licensing of Measuring Instrument Businesses

The BSMI requires that a license be obtained in order for any person to be engaged in activities of manufacturing, repairing or importing measuring instruments. By the end of 2021, there were 1,255 measuring instrument enterprises in Taiwan, among them 256 engaging in manufacturing, 221 in repairing, and 778 in importing measuring instruments.

Licensing of measuring intrument businesses by the end of 2021



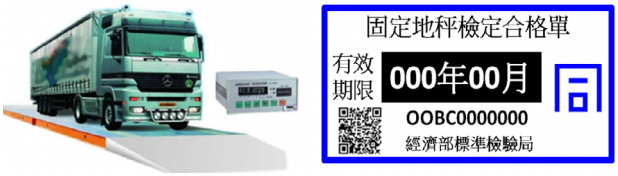
▲ *Chart 2- Licensing of measuring instrument businesses by the end of 2021*

(2) Verification and Inspection of the Instruments

21 kinds of measuring instruments (please refer to Table 3 for more details) are subject to verification before they are allowed to be placed on the market. After they pass verification, the products shall be inscribed, sprayed, branded or lead-sealed with the logo " 卐 " and/or affixed with a conformity sticker. These measuring instruments are also subject to inspection when they are put in service. In 2021, 4,650,641 instruments were verified and inspected, 60% of them were water meters and watt hour meters. The rate of non-compliance is 0.17%.

▲ *Breath Testers with Verification Mark " "*

▶ *Verification Mark " 卐 "*



▲ *Fixed Weighbridge with Verification Mark " 卐 "*

▶ *Verification Mark " 卐 "*

(3) Type-Approval of Measuring Instruments

Legal measuring instruments that require higher levels of accuracy, stability and durability may be subject to type approval. These legal measuring instruments, prior to manufacture or importation, shall be filed for type approval to the BSMI. Once the type of an instrument is approved, the BSMI issues a type approval certificate, which serves as a permission for them to apply for initial verification. Please refer to Table 4 for the list of such instruments.

(4) Project on A/L Measuring Instruments in 2021

A/L measuring instruments are critical instruments for law enforcement for implementing environmental protection policies. In order to ensure the accuracy of the instruments and to protect the rights and interests of consumers, A/L measuring instruments were added to the scope of legal measuring instruments under cross-agency collaboration with the Environmental Protection Administration. A/L measuring instruments shall be verified by the BSMI before being used for law enforcement beginning on October 1, 2021. This project also developed a technical specification for verification of A/L measuring instruments as well as amended 4 management regulations.

2. Scientific Metrology

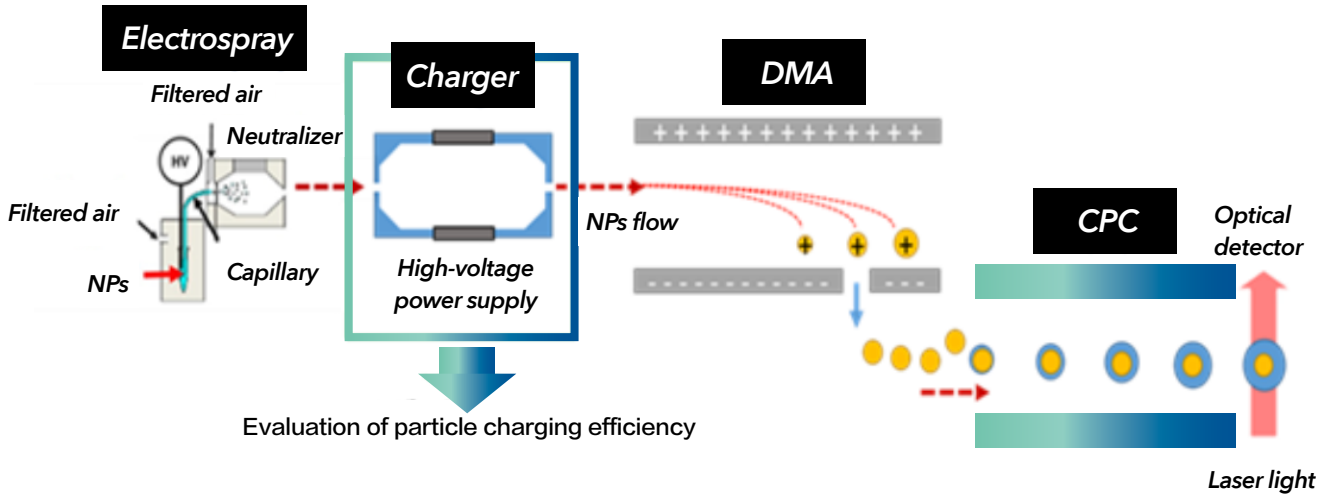
Being an associate member of the General Conference on Weights and Measures (CGPM) and a signatory to the Mutual Recognition Arrangement of the International Committee of Weights and Measures (CIPM MRA), the calibration and measurement capabilities of our national measurement laboratories are traced to international measurement standards and recognized by other countries.

(1) National Measurement Standard Laboratories in Brief

The National Measurement System consists of three national measurement laboratories, which are National Metrology Laboratory (NML), National Time and Frequency Standard Laboratory (NTFSL), and National Radiation Standard Laboratory (NRSL). The whole system maintains 133 sets of standard measurement systems in 17 fields, and provides 5,085 calibration services for primary and secondary laboratories. In 2021, they participated in key comparisons for 11 items of measurement traceability. There were 396 items of measurement standards registered in the BIPM's database by the year end, ensuring that Taiwan's national measurement standards are equivalent to international standards.

(2) Nanoparticle Concentration Measurement Technology - Semiconductor Electronic Grade Reagents

In order to satisfy the demands for particle pollutants detection of raw material in the semiconductor manufacturing process, NML, utilizing the commercial gold particles, has developed a low-concentration nanoparticle measurement technology with the detection limit of particle size < 20 nm, concentration detection < 1×106 cm-3, and relative standard uncertainty < 5 %. Furthermore, NML has developed a nanoparticle generation technology for online calibration in order to avoid the measurement deviation caused by the small size of the liquid standard. The technology of differential electrical mobility classifier is utilized to generate single nanoparticles, with the particle size ranging from 5 to 20 nm, the relative standard uncertainty < 10 %.



▲ *Experimental scheme for nanoparticle concentration measurement with Charger, Differential mobility analyzer and Condensation particle counter.*

(3) Measuring Systems

Measuring systems in the table below were improved by the NML in 2021.

Item	*System name*	*System spec before improvement*	*System spec after improvement*	*Applications*
1	V06 Primary Shock Vibration Calibration System	Measuring Range: (homodyne type): 200 to 10 000 m/s2 Shock Time: 0.3 to 3.0 ms Uncertainty: 0.8 %	Measuring Range: (heterodyne type): 200 to 10 000 m/s2 Shock Time: 0.3 to 3.0 ms Uncertainty: 0.75 %	Improve the accuracy of shock acceleration, save adjustment time for system optical path alignment, and enhance system stability.
2	O07 Absolute Cryogenic Radiometer Measurement System	Measuring Range: 70 to 10 000 cd Uncertainty: 0.8 %	Measuring Range: 70 to 10 000 cd Uncertainty: 0.7 % Range: (-0.5 s to 0.5 s)	Improve the traceability of NML's primary standard system in light intensity, illuminance, illuminance response, luminous flux and spectral response.
3	KJ07 Portable Cesium Clock Time Scale Calibration System	none	Measurement uncertainty: vs UTC(TL): 3 (ns) @Trip-time < 3 h vs UTC(TL): 6 (ns) @Trip-time < 30 h vs UTC: 10 (ns) @Trip-time < 30 h	Provide site calibration for time scale at a remote site. The time scales include the primary clocks of 5G mobile communications, electric power systems, financial markets, internet data center, and ICT manufacturing industries, etc.

(4) Promotion of Measuring Techniques

In support of industrial development, the BSMI and the NML held 12 seminars and 2 workshops to share knowledge and information attained from research projects with the industry, and to introduce related services. Important topics include metrology techniques in areas of smart machinery, the new SI units, ISO 17025:2017, etc. In the field of ionizing radiation, the NRSL held 2 seminars on proficiency testing programs to enhance technical exchanges of related secondary standard laboratories and uplift their capabilities. In the field of time and frequency, the NTFSL held 2 workshops on proficiency testing. The NTFSL also held an online Asia Pacific Workshop on Time and Frequency (ATF2021) among NMIs of Asia-Pacific Metrology Program (APMP) to exchange technical information.

3.Awareness Programs

(1) World Metrology Day

BSMI has organized series of forums on international metrology trends for years to promote the World Metrology Day. In 2021, the theme for World Metrology Day is "Measurement for Health." It emphasized the importance of "epidemic prevention" under the huge impact and challenges of the COVID-19, and highlighted the role of "measurement" (i.e., metrology infrastructure) in epidemic prevention and health issues. A special video was published to share Taiwan's excellence in epidemic prevention and health-related measurement technologies, illustrating the importance and contribution of measurement in advanced research, industrial manufacturing, health and daily economic activities.

▲ *Dr. Ching-Chang Lien, Director General of BSMI, explained the theme of WMD and the contributions of metrology infrastructure.*

▲ *2021 World Metrology Day*

▲ *Dr. Wynand Louw, President of CIPM, greeted the participants and illustrated the global metrology trend.*

(2) World Accreditation Day

The BSMI supports and supervises the operation of Taiwan Accreditation Foundation (TAF), which is a member of regional accreditation organizations (APAC) and international accreditation organizations (ILAC and IAF).

In view of the Sustainable Development Goals (SDGs) of the United Nations, IAF and ILAC jointly set the annual theme of the 2021 World Accreditation Day for "Accreditation: Supporting the Implementation of the SDGs." Prosperity in the context of the SDGs seeks to ensure that all human beings can enjoy prosperous and fulfilling lives, and that economic, social, and technological progress occur in harmony with nature. In response to the publicity of international accreditation organizations, TAF issued a newsletter of 2021 World Accreditation Day and gave examples to show the role and contributions of TAF accreditation in supporting SDGs in our country.

▲ *2021 World Accreditation Day*

<Table 3>

Categories and Scopes of Weights & Measuring Instruments Subject to Verification and Inspection

	Categories	*Scopes*
1	Taximeters	
2	Weighing instruments	
3	Non-Invasive mechanical sphygmomanometers	
4	Volumeters	(1) Liquid volumetric meters: metal measuring buckets and measuring tanks marked with divisions; excluding the following types of measuring tanks: (i) Measuring tanks with a capacity of more than 110 m3; and (ii) Pressure measuring tanks. (2) Diaphragm gas meters, excluding gas meters with a maximum air flowrate of more than 100 m3/h. (3) Water meters: volumetric water meters, velocity water meters (Woltmann meters, single-jet meters and multi-jet meters), combination water meters and vortex water meters, excluding water meters with a nominal diameter of more than 300 mm. (4) Oil meters provided for trading petroleum products, excluding oil meters with a nominal diameter of more than 160 mm. (5) Liquefied petroleum gas flow meters. (6) Air to liquid volumetric ratio measuring instruments for official inspection. (Verification entered into force from October 1, 2021).
5	Electricity meters	Watt-hour meters, Var-hour meters, Watt-hour demand meters, Static electricity meters and Instrument transformers.
6	Speedometers	(1) Radar speedometers for law enforcement. (2) Laser speedometers for law enforcement. (3) Inductive loop speedometers for law enforcement. (4) Average speed control devices for law enforcement (Verification entered into force on January 1, 2021).
7	Sound level meters for official inspection	
8	Concentration meters	(1) Breath alcohol testers and analyzers for official inspection. (2) Rice grain moisture meters. (3) Field corn moisture meters. (4) Vehicle exhaust emissions analyzers for official inspection, excluding those used for motorcycles and diesel engines.
9	Illuminance meters for official inspection	
10	Electronic clinical thermometers	

<Table 4>

Categories and Scopes of Weights & Measuring Instruments Subject to Type Approval

	Categories	*Scopes*
1	Taximeters	
2	Electronic non-automatic weighing instruments, excluding those provided with an automatic packaging function	(1) Price-computing weighing instruments; (2) Non-price-computing weighing instruments: with a maximum capacity of more than 3 kg and not more than 100 kg, and with the number of verification scale intervals (n) all between 1,000~10,000, excluding portable suspended weighing instruments (portable hook scales).
3	Water meters	(1) Vortex water meters with a nominal diameter of not less than 50 mm and not more than 100 mm; (2) Volumetric meters and velocity meters (Woltmann type, single jet type, and multi jet type) with a nominal diameter not less than 13 mm and not more than 300 mm.
4	Diaphragm gas meters: with a maximum flowrate of not more than 16 m3/h	

Action of the year

Product Safety

The BSMI is one of the regulatory authorities in Taiwan. It operates mandatory inspection of products under the Commodity Inspection Act. Products fall under the jurisdiction of BSMI are mostly consumer-related commodities, including electrical & electronic products, mechanical products and chemical products. Commodities, both imported and domestically produced, that are announced to be subject to regulatory control, shall comply with relevant requirements before they are imported or placed on the market. Inspection of such commodities is carried out by the following four conformity assessment procedures, listed in the order of stringency from high to low, namely:

- Batch-by-Batch Inspection (including Type-Approved Batch Inspection);
- Monitoring Inspection;
- Registration of Product Certification (RPC); and
- Declaration of Conformity (DoC).

After these regulated products enter the marketplace, they are monitored by the post-market surveillance system. In addition, according to Consumer Protection Act, the BSMI also keeps an eye on non-regulated products that are placed on the market or used by consumers to protect the public from hazards resulted from unsafe products.

Commodity Inspection Act

Governing products subject to mandatory inspection

BSMI's Activities

- *Pre-market Inspection*
- *Post-market Surveillance*

Consumer Protection Act

Products in general, other than those regulated by competent authorities

BSMI's Activities

- *Post-market Surveillance*

1.Pre-Market Measures

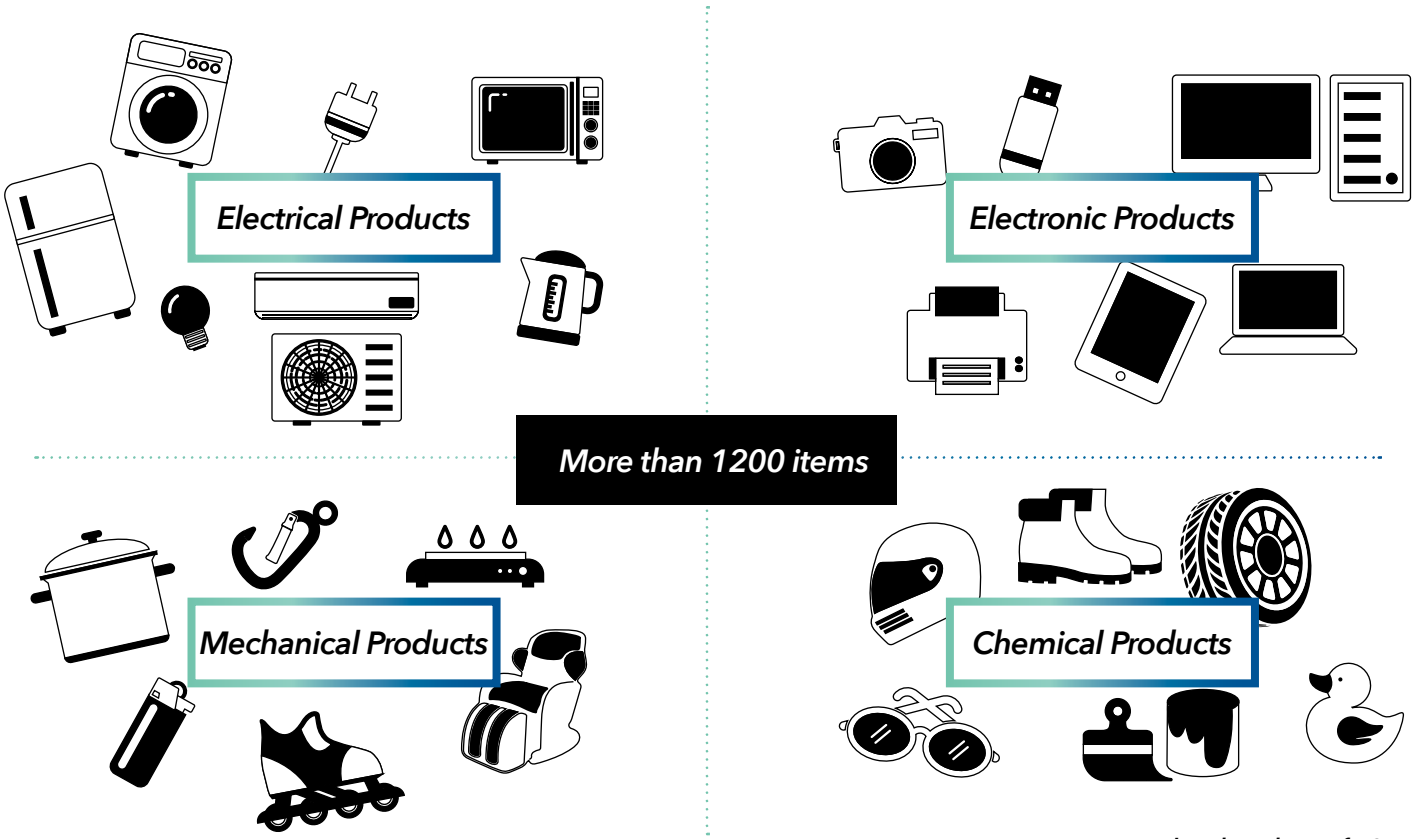
(1) Regulated Products

Products subject to mandatory inspection are required to follow the designated conformity assessment procedures and comply with the applicable inspection standards. The Commodity Inspection Mark shall be affixed to all products that comply with regulatory inspection requirements.

The number of commodities subject to regulatory inspection was 1,309 by the end of 2021. Most of them were mechanical, electrical, electronic products, and textiles. (Detailed description of the product items are provided in Table 5).

There were 55,747 batches of products inspected during the year, 99.2% of them being imported products; 56.9% being mechanical, electrical and electronic products.

◀ *Commodity Inspection Mark*



▲ *Regulated Products of BSMI*

(2) Changes to Technical Regulations

The BSMI periodically reviews its laws and regulations. In 2021, it adopted 25 technical regulations, including new and amended, with the goal of enhancing protection both of consumers and the environment that could keep abreast with the needs and development of modern times. Products involved were mainly household electronic devices. The BSMI notified the proposed regulations to the World Trade Organization (WTO) (Please see Tables 6 to 8).

2.Post-Market Surveillance

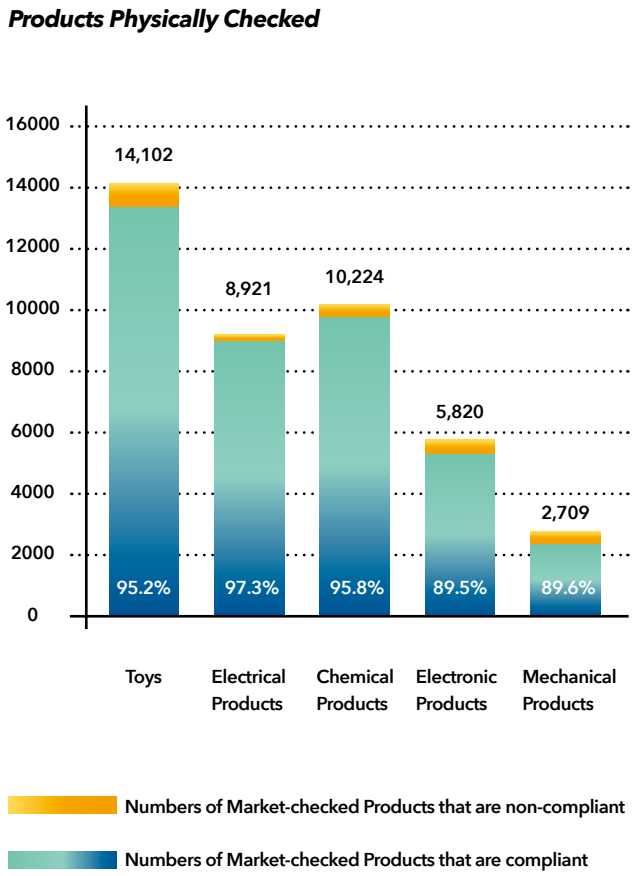
Post-market surveillance system is guided by an annual plan, prepared at the beginning of each year and forwarded to BSMI Branches located around the country for implementation. The annual plan identifies products of high risks and specifies principles for conducting surveillance activities. Market surveillance is performed by the 4 approaches listed below. Results of market surveillance activities and investigations into product incidents are used as references for making the next year's annual plan.

- Market Checks
- Testing of Purchased Products
- Incident Reports & Product Recalls
- Reports from Volunteers and Consumers

(1) Market Checks

The projects basically target products with high risks, with high frequencies of noncompliance and of concerns to the public. Such products in 2021 encompassed surveillance video (audio) equipment, children's cameras, dashcam, toys, power banks, power adapters, beauty salon appliances, car seats, etc. Penalties, including fines, recall of products, implementation of corrective actions, prohibition of display/sale and rescission of certificates, were imposed on noncompliant products depending on the situations of violation.

In 2021, 72,128 products were market-checked for their compliance with relevant labelling requirements, 41,776 of which were physically checked and the rest were checked over the Internet. For those physically checked, toys outnumbered other products, with a total of 14,102 items checked during the year. Compliance rate of electrical product is the highest, accounting for 97.3% of its own. The bar chart below illustrates the numbers of items checked and their respective compliance rate of the 5 sectors.



▲ *Chart 3- Products Physically Checked*

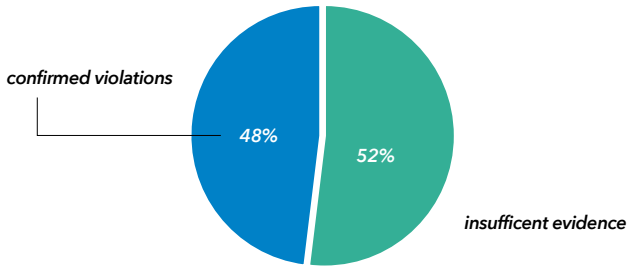
(2) Testing of Purchased Products

42 projects were implemented in 2021 to test 536 products purchased from the market. These projects focused on compliance of the products' critical features against national standards. For examples, slime toys were tested for migration of boron, wireless chargers for conducted interference, baby carriers for durability, electric blankets for rise of temperature, portable gas stoves for electronic ignition system, etc.

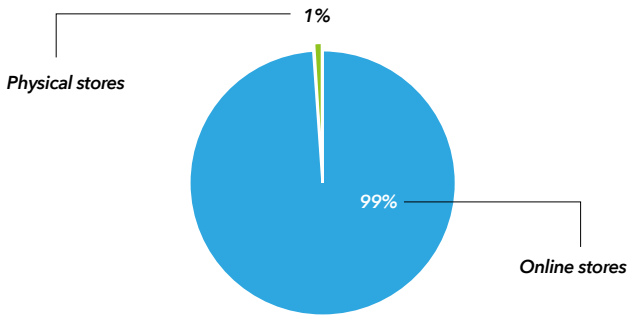
(3) Reports from Volunteers and Consumers

The BSMI has been implementing a volunteer program since 1991 to recruit consumers to help uncover suspect products on the marketplace. These volunteers (700 in 2021) are important assets of the BSMI as they serve a bridge between the BSMI and consumers and help disseminate product safety knowledge. In 2021, volunteers reported 1,498 cases of regulated products that possibly violated relevant requirements, and 712 violations were confirmed, accounting for 47.5% of the reports.

For reports made by consumers, there were 13,181 reports about suspect products in 2021, of which 98.7% of the total products were sold on the Internet, due to the prevalence of e-commerce. Products involved were mainly power supply products for automotive cigar lighters, chargers, and LCD writing tablets that were imported for sale on the Internet without bearing the required labeling or marking information.



▲ *Chart 4- Reports from Volunteers in 2021*



▲ *Chart 5- Reports from Consumers in 2021*

To tackle the problem, the BSMI adopts several pragmatic approaches. These approaches include monitoring products sold on popular shopping websites, strengthening cooperation with online shopping platforms by imposing an obligation on the operators to ensure that information about the compliance of products with mandatory requirements is made available to consumers, and promoting safety awareness to consumers and sellers through social medias like Facebook or App Line, in which we also disseminate timely safety messages about products that are of high concern to the public. In addition, the BSMI is planning to target its online market checks towards popular products sold online with high evaluation/comments and high sales number of products, such as monitors, power banks, perm hair electric curlers and power supply products for automotive cigar lighters.

(4) Incident Reports & Product Recalls

Timely incident reports are critical to avoid possible injuries or serious accidents from re-occurring. To encourage reporting, the BSMI operates a Product Safety Information Website allowing people involved in incidents, people with the obligation of reporting incidents or volunteers, to notify incidents caused by unsafe products. Investigation will be initiated upon receipt of the notifications. In 2021, the BSMI received 153 product incident reports, of which 128 were filed and investigated (the other 25 being either repeated cases, forwarded to the responsible authorities for processing, or not involving products).

The website also provides unsafe product information on recalled products and violating products. The information is updated daily by the BSMI, sourcing from domestic companies and competent authorities of other countries. In 2021, 1,176 pieces of information were provided on the website. For product recalls, the BSMI received 10 cases of voluntary recalls issued by the industry in the year.

Product Safety Information Website and its QR Code

http://safety.bsmi.gov.tw

<Table 5>

Numbers and Inspected Batches of Regulated Products by Categories

Categories	*Number of Product Items*	*Number of Inspected Batches*
Total	***1,309***	***55,747***
Mineral products	22	211
Products of the chemical or allied industries	47	108
Plastics and articles thereof; rubber and articles thereof	51	827
Raw hides and skins, leather, fur skins and articles thereof; saddler and harness; travel goods, handbags and similar containers; articles of animal gut (other than silk-worm gut)	8	540
Wood and articles of wood; wood charcoal; cork and articles of cork; manufactures of straw, of esparto or of other plaiting materials; basket ware and wickerwork	179	884
Pulp of wood or of other fibrous cellulosic material; recovered (waste and scrap) paper or paperboard; paper and paperboard and articles thereof	21	76
Textiles and textile articles	382	2,989
Footwear, headgear, umbrellas, sun umbrellas, walking-sticks, seat-sticks, whips, riding-crops and parts thereof, prepared feathers and articles made therewith; artificial flowers; articles of human hair	27	417
Articles of stone, plaster, cement, asbestos, mica or similar materials; ceramic products; glass and glassware	19	233
Base metals and articles of base metal	54	346
Machinery and mechanical appliances; electrical equipment; parts thereof; sound recorders and reproducers, television image and sound recorders and reproducers, and parts and accessories of such articles	343	31,758
Vehicles, aircraft, vessels and associated transport equipment	7	841
Optical, photographic, cinematographic, measuring, checking, precision, medical or surgical instruments and apparatus; clocks and watches; musical instruments; parts and accessories thereof	16	496
Miscellaneous manufactured articles	133	16,021

<Table 6>

Products Added to the List of Regulated Products in 2021

	Product Items	*Effective Date*	*Description*
1	Automobile light alloy disc wheels (G/TBT/N/TPKM/386/Add.1)	2021.05.01	Inspection standard: CNS 7135. Conformity Assessment Procedure: RPC or TABI.
2	Electric motorcycle charging system equipment and battery swap system equipment (G/TBT/N/TPKM/401/Add.1)	2021.05.01	Inspection standards: CNS 16125, CNS 16126, CNS 16127, CNS 16128 and Section 5 of CNS 15663. Conformity Assessment Procedure: RPC.
3	Exterior tiles (G/TBT/N/TPKM/425/Add.1)	2021.08.01	Inspection standard: CNS 9737. Conformity Assessment Procedure: RPC.
4	Polyvinyl chloride pipes (G/TBT/N/TPKM/460)	2021.08.21	Inspection standards: CNS 1298 (PVC pipes) and CNS 4053-1 (PVC pipes for water supply). Conformity Assessment Procedure: RPC or Batch-by-Batch Inspection.

<Table 7>

Products Added to the List of Regulated Products in 2021

	Product Items	Effective Date	Description		
			Inspection Standards Updated	Inspection Standards Added	Inspection Scope Modified
1	Self-ballasted LED lamps (G/TBT/N/TPKM/388/Add.1)	2021.01.01	✔		
2	Hot cathode fluorescent lamps (G/TBT/N/TPKM/398/Add.1)	2021.01.01	✔		
3	Electric storage drink water heaters (G/TBT/N/TPKM/404/Add.1)	2021.07.01		✔	
4	Polyvinyl chloride pipes (G/TBT/N/TPKM/460/Add.1)	2021.07.01	✔	✔	

<Table 8>

Proposed and Adopted Technical Regulations That Come into Effect in 2022 or a Later Time

	Product Items	Effective Date	Description		
			Inspection Standards Updated	Inspection Standards Added	Inspection Scope Modified
1	Double-capped LED lamps (G/TBT/N/TPKM/406/Add.1)	2022.01.01			✔ New
2	Hot-dip galvanized steel pipes (G/TBT/N/TPKM/423/Add.1)	2022.01.01			✔ New
3	Infant bath seats (G/TBT/N/TPKM/417/Add.1)	2022.10.01			✔ Implementation Postponed
4	Chair mounted seats (G/TBT/N/TPKM/427/Add.1)	2022.11.01			✔ Implementation Postponed
5	Cribs and cradles for domestic use (G/TBT/N/TPKM/433/Add.1)	2022.11.01			✔ Implementation Postponed
6	Reclined cradles (G/TBT/N/TPKM/437/Add.1)	2022.11.01			✔ Implementation Postponed
7	Playpens for domestic use (G/TBT/N/TPKM/438/Add.1)	2022.12.01			✔ Implementation Postponed
8	Children's chairs and stools (G/TBT/N/TPKM/439/Add.1)	2022.12.01			✔ Implementation Postponed
9	Table mounted chairs (G/TBT/N/TPKM/440/Add.1)	2022.12.01			✔ Implementation Postponed
10	Safety barriers (G/TBT/N/TPKM/441/Add.1)	2022.12.01			✔ Implementation Postponed
11	Carry cots and stands (G/TBT/N/TPKM/445/Add.1)	2022.12.01			✔ Implementation Postponed
12	Polyvinyl chloride floorcoverings (G/TBT/N/TPKM/478)	2023.01.01			✔ New
13	Fire doors of buildings (G/TBT/N/TPKM/466/Add.1)	2022.07.01	✔		
14	Microwave ovens (G/TBT/N/TPKM/461/Add.1)	2023.01.01		✔	
15	Fans and 6 other electrical appliances (G/TBT/N/TPKM/452/Add.1)	2023.01.01			✔ New
16	Fabric steamers (G/TBT/N/TPKM/459/Add.1)	2023.01.01			✔ New
17	Air-cleaning appliances (G/TBT/N/TPKM/463)	2023.01.01		✔	

Action of the year

Testing and Certification

The BSMI takes an important role in the development of the national quality infrastructure in Taiwan. It maintains testing laboratories to support the regulated regime in terms of both pre-market control and post-market surveillance. The technical competence is also of great value to fulfill tasks required in national development projects. These have yielded a variety of services in the voluntary regime that are relied upon by other government agencies and industry.

1. Laboratories of BSMI in Brief

Laboratories of BSMI are located at the Headquarters and six Branches, which provide tests mainly for physical, chemical, electrical and electromagnetic compatibility properties of products. Laboratories in headquarters also serve as hubs for technical support to those in the Branches. To make the best use of resources, specialized laboratories have been established to avoid repetition and to build on the expertise in the specific field. The followings are the specialized areas of BSMI's testing laboratories.

To keep pace with the emerging testing technologies, which bring forward products with new features, the BSMI participates actively in national programs on science and technology development to contribute its expertise in testing and certification.
For projects that the BSMI participated in 2021 and their brief descriptions are listed in Table 9.

Head Office	Keelung Branch	Hsinchu Branch	Taichung Branch	Tainan Branch	Kaohsiung Branch	Hualien Branch
metallic materials	suitcases	lubricants	lithium batteries	mass calibration	paints	cement
circuit breakers	electric hand tools	gas appliances	baby walkers	electric appliances	wires and cables	pressure cookers
pressure vessels	small household appliances	luminaires	safety belts for working at height	faucets	LPG	toys
electronic products	disposable lighters		voltage and temperature calibration	water meters	fishery products for export	
ceramic products			performance anomaly detection / analysis	lifting jacks	plywood	
				personal protective equipment	metal composition	

2. Voluntary Certification Systems

The BSMI developed certification systems for industrial products, fishery products, and renewable energy to help our manufacturers achieve a higher level of quality and to facilitate their access to international markets.

(1) Voluntary Product Certification (VPC) System

The VPC System was launched by the BSMI in 2004, which differs from another voluntary product certification system, the CNS Mark System, operated by the BSMI in the standards used for testing. The VPC System intends to upgrade the levels of design, development and production of products based on more stringent requirements. In 2021, the VPC System contained 35 product items, most of them being electrical and electronic products (e.g. fluorescent lamps and starter holders, AC motor capacitors, switches, heat pump water heaters, medium and small wind turbines, stationary training equipment, etc.). There were more than 373 certified products by the end of 2021. VPC certified products can demonstrate to the market their enhanced performance and reliable quality assurance. Among the VPC certified products, photo voltaic modules and solar inverters received more attention from the public along with the government's promotion projects.

▲ *Product with the VPC Mark*

▲ *Possible applications of the 5G smart pole*

In addition to the requirements of safety, grid connection, and electromagnetic compatibility, solar inverters, under VPC scheme, also have to meet information security requirements in accordance with the "Technical Specification for Security Testing of PV Inverters and Monitoring Units" adopted on December 30, 2020. The specification was included in the certification requirements on July 22, 2021. Starting from 2017 till 2021, a total of 145 photovoltaic modules and 115 solar inverters were certified.

As the 5G technology is fully developed, the innovative applications of 5G can provided services improving the quality of citizens' daily activities, such as smart transportation, self-driving cars, smart city governance, telemedicine, etc. Deployment of 5G smart poles in large quantity is critical to address the limited transmission distance of 5G in order to provide full coverage. The 5G smart poles are multi-functional. They not only serve as 5G base stations to expand 5G coverage but also provide smart lighting, AI smart identification, environmental sensing detection and electric vehicle charging and other public-service functions.

Lack of international standards for 5G smart poles makes it difficult to deploy 5G smart poles on a large scale. The BSMI is developing relevant standards and certification system for 5G smart poles to ensure their safety.

(2) Certification of Fishery Products Exported to Foreign Countries

The BSMI offers the services of issuing health certificates and implementing the HACCP certification. The health certificates demonstrate compliance of Taiwan's processing establishments of fishery products with the health and quality requirements of the trading partners. The HACCP certification is implemented to assist export of food products and fishery products to foreign countries. In 2021, 3,955 health certificates were issued to 86 food processing plants.

The BSMI also serves as one of the national contact points to coordinate administrative arrangements for registering Taiwan's processing establishments and fishing vessels with the European Union, Russia, and Brazil. The numbers of registered establishments and vessels are described in Table 10.

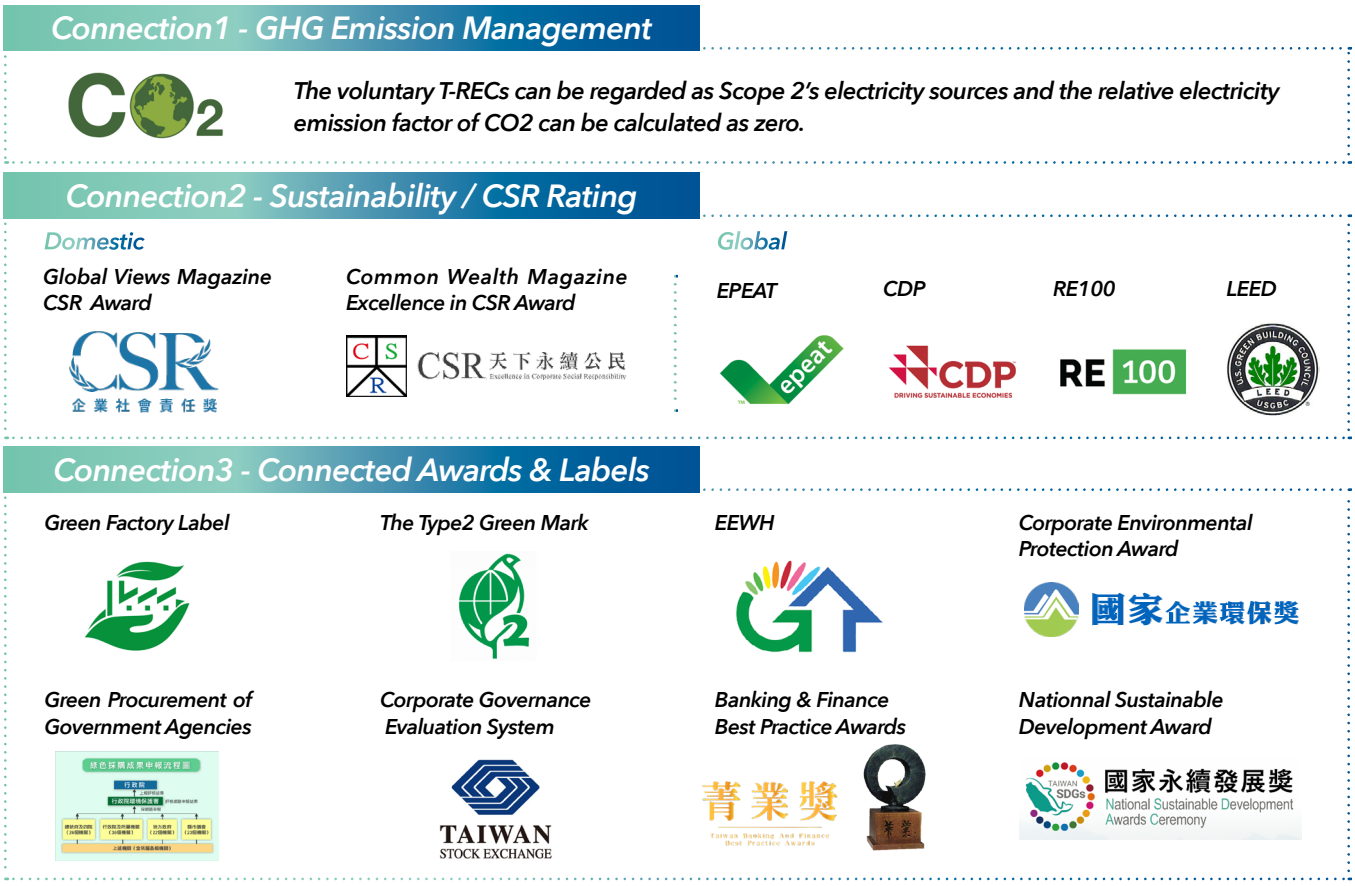
(3) Taiwan Renewable Energy Certificates

The National Renewable Energy Certificate Center within the BSMI was officially launched in 2017 with a key mission to issue Taiwan Renewable Energy Certificates (T-RECs), which is an important tool for companies to demonstrate their commitment to Corporate Social Responsibility along with the efforts to protect the environment. Starting from May 2017 till the end of December 2021, the BSMI issued a total of 958,176 T-RECs, and 827,445 of them were traded in the market. T-RECs are recognized by the Environmental Protection Administration (EPA) and the tracking system is connected to the National Greenhouse Gas (GHG) Registry Platform.

Based on the amendment to the Renewable Energy Development Act, the BSMI introduced the transaction matching functions in the T-REC website in March of 2020 to facilitate trading of renewable energy certificates. By the end of 2021, a total of 41 renewable energy stakeholders procured green energy via wheeling, where the annual transaction volume of green electricity is about 930,000 MWh (equivalent to 930,000 Taiwan Renewable Energy Certificates).

The Chinese version of the T-REC Center website (https://www.trec.org.tw/) was revised in 2021 to add a "Certification Declaration Area". Enterprises can voluntarily declare the application and use of T-REC to show their commitment to environmental sustainability. At international level, the BSMI has successfully applied for a APEC-funded project "Utilizing Renewable Energy Certification to Facilitate APEC Regional Renewable Energy Growth" to promote sharing of best practices and cross-border cooperation at regional level.

▼ *T-REC' s Connection and Value*



3. Project Certification on Offshore Wind Farms

The BSMI amended “Directions for Demonstration and Guidance on Reviewing Project Certification of Offshore Wind Farm Projects” in 2021, simplifying the working group review stage in the review procedure. The directions require offshore wind farms to be reviewed for their implementation of project certification at each stage of the wind farm development to ensure the overall safety and quality of offshore wind farm construction. In 2021, a total of 11 offshore wind farms apply for project certification review, and 2 offshore wind farms have completed the project certification review procedure and also received the outcome documents issued by the BSMI for applying the electricity licenses.

▲ *Taiwan Power Company Offshore Wind Farm Phase 1 Project Final Review Committee Meeting in 2021*

<Table 9>

Participated National Programs on Science and Technology Development

Title of Category	*Description of Projects*
Third party certification and testing scheme	• Publication of "Directions for Demonstration and Guidance on Reviewing Project Certification of Offshore Wind Farm Projects," and completion of project certification review of Formosa 1 wind farm • Offshore wind farm project certification, due diligence, and marine warranty survey • PV system outdoor test and geothermal productivity test
Smart grid	• Electricity metering data exchange standards • Development of IEEE 2030.5 common smart inverter profile testing technology • Research and analysis of smart grid DER (Distributed Energy Resource) specific communication service mapping and logical nodes communication structure standards • Smart home HNA (Home Network Adapter) device conformance test service platform • Low-voltage switchgear and control gear, electromechanical elementary relays standards • Luminaries standards • Maximum sound pressure level measurement equipment of sound system equipment
Off-shore wind turbines	• Establishment of off-shore wind turbine load measurement, power measurement and pitch system testing environment • Publication of standards for type testing and certification of wind turbines and power measurement techniques • Revision of standards for wind turbine design requirements by taking typhoon related impacts into account • Revision of standards for wind turbine design requirements by taking earthquake related impacts into account • Publication of "Directions for Demonstration and Guidance on Reviewing Project Certification of Offshore Wind Farm Projects," and completion of one wind farm project certification review
Emerging energy	• LED lighting system (indoor/outdoor) testing • Freezers/air-conditioners and new coolants testing • Small and medium-sized wind turbines testing technology • Fuel cells and hydrogen energy system testing • PV power generation system and modules testing • Forestry wastes of transformed bio-fuel or chemical materials testing technology • International cooperation on standards and certification for small wind turbines
Assistive devices	• Elder care occupancy detector • Wheelchair power • Power raising toilet seat • Power raising shower chair

<Table 10>

Registered Establishments and Vessels in Trading Partners

Areas/Countries	*Processing Establishments*	*Fishing Vessels*
European Union	36	122
Russia	14	2
Brazil	24	386

Action of the year

International Cooperation

The different roles that BSMI takes in our national quality infrastructure have yielded a variety of international cooperation activities, which help us achieve goals both internally and externally.

Internally, we engage our partner countries in exchanges of information, practices and experts to maintain a safe and fair society, as well as to support sound development of industry. Externally, we spare no efforts to facilitate export of our products by reducing unnecessary conformity assessment costs. We also participate actively in the limited number of international organizations of which we are a member to enhance our visibility in the international community in this area.

1. Bilateral Cooperation

The BSMI's international cooperation activities at bilateral level mainly take the forms of negotiating cooperative documents, convening formal meetings with counterpart organizations, holding joint workshops and providing training courses. The subject matters encompass a wide range of topics, which in addition to those under the BSMI's jurisdiction, may also involve the activities of other government bodies. The important activities in the year are highlighted below.

(1) Joint Activities

Joint workshops are of great value to have focused discussion on issues of interest to the BSMI and partner countries. They can be used to engage both sides in exchanging experiences from considerably extensive aspects. They also build bridges between private sectors for further cooperation. Introduction to the regulatory systems by way of workshops makes it easier for exporters to understand technical regulations of the target market and complete conformity assessment procedures in a more efficient way. There were several featured events in 2021 as listed below.

Paraguay - Signing of Agreement on Technical Cooperation and Convening of the 1st Working Level Meeting

On March 18, Director General Lien of BSMI and Director General Giménez of the National Institute of Technology, Standardization and Metrology (INTN) signed an Agreement on Technical Cooperation to promote technical cooperation. Both sides agreed to build mutual trust in the technical competence of the two sides' respective conformity assessment bodies and harmonize their regulatory systems through bilateral cooperation and exchanges in the areas of standardization, metrology and conformity assessment.

▲ *Director General Lien of BSMI and Director General Giménez of INTN signed the Agreement on Technical Cooperation in March 2021.*

The 1st Working Level Meeting was held virtually on November 11. Both sides agreed on areas of interest for cooperation in 2022, including sharing of respective standardization systems, consumer product safety systems, and exchange development of related standards and regulatory framework in areas of electric mobility, electric buses and electric chargers, and to arrange training courses for technical personnel to enhance their knowledge and competence in electrical safety in 2022.

▲ *1st Working Level Meeting was held in November 2021.*

SMIIC - SMIIC Halal Scheme Webinar

Under the Cooperation Agreement on standardization matters signed in 2018, the BSMI and the Standards and Metrology Institute for Islamic Countries (SMIIC) jointly held a webinar on SMIIC Halal Scheme on April 27, 2021. In the webinar, the SMIIC presented on SMIIC halal standards, halal product certification and accreditation scheme, and the future works of SMIIC.

▲ *SMIIC Halal Scheme Webinar in April 2021*

The United States - Consumer Product Safety Webinar

Under the Memorandum of Understanding on consumer product safety matters signed in 2004, the BSMI and Consumer Product Safety Commission (CPSC) organize joint activities on a regular basis."Consumer Product Safety Webinar: Overviews of U.S. Battery Safety Requirements" was held on July 14. The webinar provided an overview of battery safety regulations in the United States and Taiwan.

EU - 2021 EV International Forum

The BSMI and the European Chamber of Commerce Taiwan (ECCT), European Economic and Trade Office (EETO) and relevant agencies of MOEA jointly convened this forum in Taipei on October 27. The forum brought together policy makers and industry experts from Taiwan, Europe and Asia to share insights and best practices on crucial topics in three sessions on: 1) charging standards and facilities, 2) charging infrastructure & power management, 3) EV ecosystems and supply chains.

▲ *Consumer Product Safety Webinar in July 2021*

▲ *2021 EV International Forum in October 2021.*

The Philippines - IEC Standards Capacity Building Program

Under the Memorandum of Understanding and Mutual Recognition Arrangement signed in 2008 and 2017, the BSMI, the Bureau of Foreign Trade (BOFT), and Taiwan Testing and Certification Center (ETC) work together to organize IEC Capacity Building Program for the Bureau of Philippines Standards (BPS). The Program was held on November 3, 4, 8 and 15, 2021 for 4 days, covering 5 IEC standards related electrical products.

▲ *IEC Standards Capacity Building Program in November 2021*

Japan - The Fifth Annual Meeting on Product Safety

Taiwan and Japan held meetings on product safety regularly under the Memorandum of Understanding signed in 2016. The fifth annual meeting was held virtually, co-hosted by the BSMI, Ministry of Trade and Industry (METI) and National Institute of Technology and Evaluation (NITE) on December 7-8. Both sides introduced their future policies on product safety and discussed regulatory practices on electric toys, household appliances powered by secondary batteries, and online shopping products, as well as shared the accident investigation experience on air-conditioners and luminaires.

▲ *Virtual meeting of the Annual Meeting on Product Safety with Japan*

Eswatini - Virtual Training on Market Surveillance Required by ISO/IEC 17065

On November 15, the BSMI delivered an online course on market surveillance required by ISO/IEC 17065 to assist Eswatini in developing their product certification scheme. The course included interpretation of Clause 7.9, brief introduction on regulatory product inspection system of BSMI and the requirements and market surveillance activities under registration of product certification scheme of BSMI.

Singapore - Exchange Session on Market Surveillance Practices

The BSMI and Consumer Product Safety Office of Singapore held a virtual meeting on market surveillance practices on December 8. Both sides briefly introduced the regulatory regime of product safety and shared valuable information and experiences on market surveillance measures.

(2) Implementation of Mutual Recognition Arrangements (MRAs)

Taiwan has signed MRAs on conformity assessment results with 7 countries. They basically cover electrical and electronic products. While the ones with the United States, Canada and Australia only apply to recognition of test reports, the ones with New Zealand, Singapore and Japan are full-fledged, with recognition extending to certificates. Testing laboratories or certification bodies were designated under the MRA frameworks, which allow products for export to the other contracting party to be tested locally, thus saving time and costs for industry.

Bilateral-MRAs

	Electronic Products	***Electrical Products***	***Tyres***	***Number of CABs being Recognized***
USA	EMC Test Reports			USA: 72TL* Taiwan: 56TL
Canada				Canada: 8TL Taiwan: 0
Australia	EMC Test Reports			Australia: 2TL Taiwan: 0
Singapore	EMC + Safety Test Reports + Certificates			Singapore: 3TL, 1CB* Taiwan: 14TL, 2CB
New Zealand				NZ: 0 Taiwan: 34TL, 1CB
Japan				Japan: 14TL, 1CB Taiwan: 0TL, 1CB
The Philippines		EMC + Safety Test Reports		Philippines: 0 Taiwan: 2TL, 1IB*

****TL-Testing Laboratory; CB-Certification Body; IB-Inspection Body***

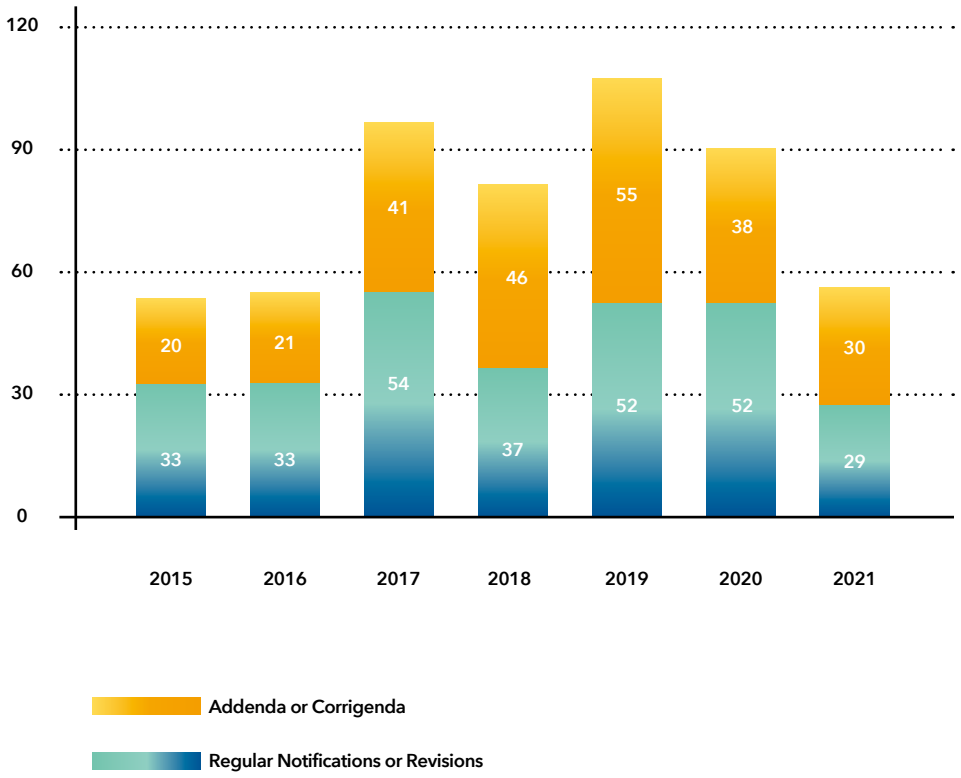
2. Multilateral Cooperation

(1) Activities under WTO/TBT Agreement

- The BSMI operates the TBT Enquiry Point as required by the WTO Agreement on Technical Barriers to Trade (TBT). Five main functions are given by this enquiry point :

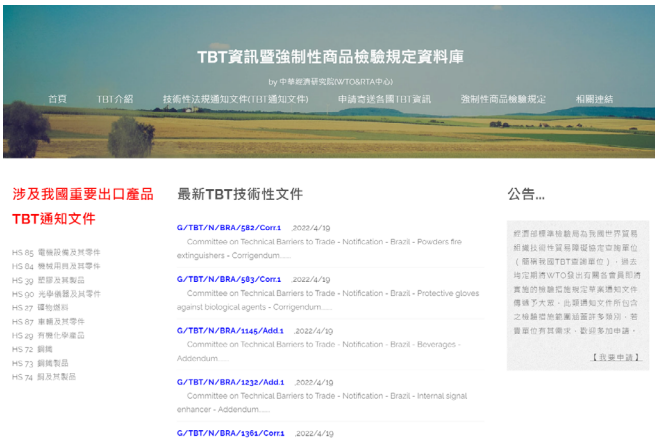
  a. To disseminate and translate TBT notifications circulated by the WTO Secretariat;
  b. To assist regulatory authorities in submitting TBT notifications and responding to comments and inquiries made by other WTO Members and business operators;
  c. To assist domestic stakeholders in providing comments on adopted or proposed measures by other WTO Members and to respond to their inquiries;
  d. To convene domestic inter-agency TBT committee meetings and coordinate views with different regulatory authorities on issues discussed at the WTO/TBT Committee meetings; and
  e. To maintain domestic on-line TBT notification database.

- In 2021, the number of submitted notifications was 59, in which 30 were addenda or corrigenda and 29 were regular notifications or revisions. In addition, 5 notifications was submitted under Article 10.7 of Agreement on Technical Barriers to Trade.



- Screening of TBT Notifications and Analyses of Trade Impacts

  TBT notifications were screened twice a month to identify those having potentially significant trade impact on products for export to our trade partners. 380 TBT notifications passed the screening criteria in 2021 and were disseminated to relevant stakeholders for their attention. 6 notified measures were further analyzed in terms of how the proposed technical regulations or conformity assessment procedures affect the industry in question, which helped business operators, in particular MSMEs, be alerted on regulatory changes in their target export market and prepare themselves for complying with the new requirements. In addition, 2 seminars were held with sectoral industry associations (chemicals, halal products, EE products) to collect feedback on the screening procedures. The feedback was positive and the efforts were acknowledged with appreciation. Screening results and the analyses were open to the public by being uploaded to the TBT Notification Database.



▲ *TBT notification database website*
http://db2.wtocenter.org.tw/tbt/index.aspx

(2) Activities under APEC/SCSC

The BSMI is responsible for coordinating Taiwan's participation in activities of the Sub-Committee on Standard and Conformance (SCSC) of Asia-Pacific Economic Cooperation (APEC). 2 SCSC meetings were held virtually in 2021. One was held in February and the other one in August. The BSMI shared with APEC Members its effort to enhance private sector engagement in WTO TBT notifications and introduced its proposed project regarding product safety issue in digital trade.

(3) Participation in International Events

The table below lists BSMI's participation in international events throughout the year.

Date	***Name of Events***
February 20, 23	APEC/SCSC 1 Meeting (virtual)
February 24-26	The 83rd WTO/TBT Committee Meeting (virtual)
June 2-4, 9	The 84th WTO/TBT Committee Meeting (virtual)
August 19	APEC JRAC Meeting (virtual)
August 20-21	APEC/SCSC 2 Meeting (virtual)
October 18-22	Annual Meeting of CIML (virtual)
November 1-2	The 28th APLMF Forum and Working Group Meetings (virtual)
November 9-12	The 85th WTO/TBT Committee Meeting (virtual)

2021
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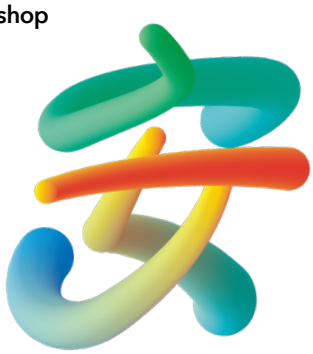

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