

13

GEOGRAPHY, ENVIRONMENT AND POPULATION



Geography, Environment and Population

Location

The Macao Special Administrative Region (MSAR) is an integral part of the People's Republic of China. Situated at the mouth of the Pearl River Delta (PRD) and bordering Guangdong Province, Macao is 60 kilometres from Hong Kong, and the time is eight hours ahead of Greenwich Mean Time. The MSAR comprises the Macao peninsula and two islands: Taipa and Coloane. Its origin point is located at latitude 22°22'40"N and longitude 113°32'22"E. Four bridges – Nobre de Carvalho Bridge, Friendship Bridge (Ponte da Amizade), Sai Van Bridge and the Macao Bridge – link the peninsula to Taipa; while the COTAI Reclamation Area links Taipa and Coloane islands.

According to Chief Executive Notice No. 128/2015 dated 20 December 2015: as stipulated in Order No. 665 of the State Council of the People's Republic of China, the Macao Special Administrative Region comprises land and marine areas, with the land area comprising the Border Gate Macao Checkpoint Building section and the Canal dos Patos section, and the marine area comprising six sections: the Inner Harbour section, Cotai channel section, southern Macao waters section, eastern Macao waters section, artificial island section, and northern Macao waters section. The boundary to the west is meridian 113°31'41.4"E, to the east 113°37'48.5"E, to the south parallel 22°04'36.0"N, and to the north 22°13'01.33"N.

Area

Due to reclamation along its coastline, Macao's total land area has grown from 11.6 square kilometres in 1912, when measurements were first taken, to 33.4 square kilometres in 2025. The Macao peninsula accounts for 9.4 square kilometres (28.1 percent) of the current area; Taipa island for 7.9 square kilometres (23.6 percent); Coloane island for 7.6 square kilometres (22.8 percent); COTAI Reclamation Area for 6.1 square kilometres (18.3 percent); New Urban Zone Area A for 1.4 square kilometres (4.2 percent); New Urban Zone Area C for 0.3 square kilometres (0.9 percent); Macao boundary crossing area on Zhuhai-Macao checkpoint on the Artificial Island of the Hong Kong-Zhuhai-Macao Bridge for 0.7 kilometres (2.1 percent), and the campus of the University of Macau for one square kilometre.

According to Chief Executive Notice No. 128/2015 dated 20 December 2015: as stipulated in Order No. 665 of the State Council of the People's Republic of China, the Central People's Government explicitly determines that the area of waters of the Macao Special Administrative Region is 85 square kilometres.

Geology and Topography

Macao mainly comprises flat land, terraces and hills. The area of flat land (including reclaimed land) is 24.3 square kilometres, accounting for 72.7 percent of the total; granite hills cover six square kilometres, or 18 percent; and terraces cover 1.2 square kilometres, or 3.6 percent. The terraces are historically areas of denudation, extending along St Augustine, Luis de Camoes Garden, the hill behind Mong Ha Kun Iam Tong Temple, Russa Hill, and the southern part of Taipa island. Their relatively small area, low elevation (20-25 metres) and gentle slopes mean that most of the terraces

are fully utilised. The remaining land – including reserves, monument sites and forests – occupies approximately 1.9 square kilometres, accounting for 5.7 percent of the total land area.

Coastline

According to Executive Order No. 209/2025 dated 20 October 2025, the Macao Special Administrative Region Coastline Map was published to determine the coastline of the Macao SAR, with 1 May 2025 as the baseline date for the revision and survey of the coastline. The total length of Macao's coastline is 79.5 kilometres, 18.5 kilometres of which are around the Macao peninsula; 49.5 kilometres are around the two islands (including Taipa Island, Cotai Reclamation Area and Coloane Island); 5.7 kilometres are around New Urban Zone Area A; 2.7 kilometres are around the Macao boundary crossing area on Zhuhai-Macao Checkpoint Artificial Island of the Hong Kong-Zhuhai-Macao Bridge; and 3.1 kilometres are around New Urban Zone Area C.

There are two types of coastline in the Macao SAR: artificial and natural coastlines. Artificial coastlines predominate, representing 84.3 percent of the total coastline length, and are mainly around the Macao peninsula and fringing eastern and northern Taipa Island. The natural coastlines mainly fringe western Taipa Island and the southern tip of Coloane Island, representing 15.7 percent of the total coastline length.

Climate

Macao is situated in a subtropical zone, with the Asian continent to the north and a wide tropical sea to the south. In winter, Macao experiences northerly winds, cold and dry weather and low rainfall, due to a cold continental high-pressure system at medium and high latitudes. In summer, Macao is mainly subject to south-westerly winds, hot and wet weather and heavy rainfall, due to the influence of oceanic tropical weather systems. The reverse of wind directions in winter and summer, together with minimal temperature variations during the day, give Macao a marine monsoon climate.

According to the climate normals of the World Meteorological Organisation (WMO), calculated with 30 years of data, the average annual precipitation in Macao between 1981 and 2010 was more than 2,000 millimetres, with most rainfall occurring between April and September. June had the most precipitation – an average of 373.7 millimetres; while December had the least – an average of 31.3 millimetres.

Macao has an average annual temperature of 22.8°C. The coolest month is January, when it averages 15.2°C. Most years, Macao has a short cold weather period when temperatures fall below 5°C. The average monthly temperature exceeds 22°C during seven months of the year, indicating that Macao has a short winter but a long summer.

Macao is frequently hit by typhoons. The typhoon season starts in May and ends in November, with July to September as its peak period.

Weather Overview

General Information

In 2025, Macao's average annual temperature was the fifth highest since 1952; relative humidity

was similar to the climate normal, and the total rainfall was lower than the climate normal, but within the normal range.

Fourteen tropical cyclones affected Macao in 2025:

1. Typhoon Wutip (11 June to 15 June);
2. A tropical depression (25 to 26 June);
3. Typhoon Danas (4 July to 6 July);
4. Typhoon Wipha (19 July to 21 July);
5. Severe Typhoon Podul (13 August and 14 August);
6. a tropical depression (16 August to 17 August);
7. Severe Typhoon Kajiki (23 August and 24 August);
8. Tropical Storm Nongfa (28 August and 29 August);
9. Severe Tropical Storm Tapah (6 September to 8 September);
10. Severe Tropical Storm Mitag (18 September to 20 September);
11. Super Typhoon Ragasa (22 September to 25 September);
12. Typhoon Matmo (3 October to 5 October);
13. Severe Tropical Storm Fengshen (20 October and 21 October); and
14. Super Typhoon Fung-wong (10 November and 11 November).

Regarding storm surge warnings, the effects of Wipha, Tapah, Ragasa and Matmo resulted in the issuance of one Red Storm Surge Warning, one Orange Storm Surge Warning, two Yellow Storm Surge Warnings and six Blue Storm Surge Warnings during 2025. Among these, Ragasa caused a maximum flooding depth of 1.51 metres in the Inner Harbour area on the morning of 24 September.

Summary of Severe Weather Warnings Issued in 2025			
Warning / Signal Type		Frequency	No. of Warning Reports Issued
Tropical Cyclone Warning	No. 1 Alert Signal	14	78
	No. 3 Strong Wind Signal	13	71
	No. 8 Northeast Gale Signal	2	15
	No. 8 Southeast Gale Signal	4	35
	No. 8 Southwest Gale Signal	0	0
	No. 8 Northwest Gale Signal	1	11
	No. 9 Increasing Gale Signal	2	3
	No. 10 Typhoon Signal	2	15

(Cont.)

Summary of Severe Weather Warnings Issued in 2025			
Warning / Signal Type		Frequency	No. of Warning Reports Issued
Strong Monsoon Warning (Black Ball)		17	55
Rainstorm Warnings	Yellow Rainstorm Warning Signal	40	65
	Red Rainstorm Warning Signal	8	11
	Black Rainstorm Warning Signal	2	6
Thunderstorm Warning		87	138
Storm Surge Alert		0	0
Storm Surge Warning	Blue Storm Surge Warning	6	14
	Yellow Storm Surge Warning	2	6
	Orange Storm Surge Warning	1	2
	Red Storm Surge Warning	1	8
	Black Storm Surge Warning	0	0

A total of 37 rainstorm warnings were issued in Macao in 2025, including the Red Rainstorm Warning Signal in the early morning of 29 May, in the morning of 17 June, at midday on 18 July and in the morning of 2 August. Two Black Rainstorm Warnings were issued during the year, on the morning of 5 August and on the afternoon of 14 August.

Temperatures

Macao had an average annual temperature of 23.2°C during 2025, which was 0.4°C higher than the climate normal, marking the fifth hottest year since 1952. The highest and the lowest average temperatures were 28.7°C in July, and 16.2°C in January, respectively. The hottest day was 5 July, when the temperature rose to 35.3°C; whereas the coldest day was 27 January, when the temperature fell to 9.4°C.

Relative Humidity

The average relative humidity during 2025 was 79 percent, similar to the climate normal. August saw the highest monthly average relative humidity, at 86 percent; whereas the lowest was 62 percent in January.

Rainfall

Total rainfall during 2025 was at a normal level of 1,891 millimetres. The highest monthly rainfall

was 605.8 millimetres, recorded in August, which was about 80 percent higher than the climate average for that month; the highest daily rainfall was 265.4 millimetres, on 14 August, making it the second-highest figure for that month since 1952.

Evaporation

The total evaporation level in 2025 was 866 millimetres, which was 11.1 millimetres more than the climate average. The monthly evaporation levels from May to October and December were each lower than the climate normal for the same months, while the monthly evaporation levels from January to April and November were higher than the climate normal.

Sunshine

During 2025, Macao had 2,573.8 hours of sunshine. The most hours of sunshine were recorded in September, totalling 271.6 hours, which was 93.3 hours above the climate normal for that month. The least hours of sunshine were recorded in November, amounting to 153 hours, which was 5.1 hours fewer than the climate normal for that month.

Wind

During 2025, Macao was subject to predominantly northerly winds in February, March, November and December; easterly winds in August and September; southerly winds in April and May; north-northeasterly winds in January and October; south-southeasterly winds in June; and south-westerly winds in July. Wind speeds averaged 11.5 kilometres per hour.

Meteorological and Geophysical Services

Meteorological and Geophysical Bureau

The Meteorological and Geophysical Bureau (SMG) is supervised by the Secretary for Transport and Public Works. It is responsible for monitoring, analysing and researching, forecasting and warning in the fields of meteorology, aviation meteorology, geophysics and the atmospheric environment.

Apart from hourly real-time weather information, the SMG issues various types of daily weather forecasts for the public, government departments and private institutions. These include five weather reports and forecasts, two marine and weather forecasts for the Macao coastal area, as well as daily weather reports over the past year, which are broadcast daily for the public.

The SMG also provides a 48-hour automatic weather forecast service, which gives hourly forecasts of temperature, humidity, wind speed, wind direction and weather conditions for the next two days on its website and mobile apps for public reference.

The SMG continues cooperating with the Macau Broadcasting Company (TDM). Every day, SMG officers explain the day's weather conditions and the forecast for the following day during the Macau Broadcasting Company's morning and afternoon TV programmes. The SMG forecasters also record weather information regularly, or when necessary, and upload it to the Internet for

download and use by various media. This information includes a weather review of the day, a two-day weather forecast and air quality report; a weekly weather forecast; and special weather information (on typhoons, rainstorms, very hot and cold weather).

In response to special weather conditions (such as tropical cyclones that appear likely to enter the South China Sea, heavy rainstorms and significant changes in temperature), the SMG sends special weather notifications to registered users, social welfare organisations and schools via WeChat, mobile apps, SMS and the Meteorological and Geophysical Bureau Telegram Channel.

Whenever a tropical cyclone develops in the northwest Pacific Ocean, the SMG monitors and produces a forecast track reporting its location and intensity in real time and for the next 120 hours. When a tropical cyclone signal is required, the SMG provides a warning signal forecast for the following one to two days, based on a table with forecasts for tropical cyclones and storm surges that is released on its official website. Citizens can learn about the potential impact of tropical cyclones during particular hours and make necessary preparations as soon as possible. When Typhoon Signal No.3 or above is issued, TDM uses split-screen views to announce the latest tropical cyclone news. The SMG also worked with relevant departments to show the latest weather warnings on electronic display screens in the Border Gate checkpoint building and the Outer Harbour Ferry Terminal, such as tropical cyclone and rainstorm warnings, to keep passengers informed regarding the weather.

In recent years, the SMG has continued to enhance its weather forecasts by adopting a “qualitative first, quantitative later” forecasting strategy. The SMG issues qualitative forecasts of severe weather through special push notifications or special weather information one to two days in advance, where feasible, to alert the public of possible weather changes in the near future. In addition, the bureau makes reference to the weather nowcasting system, together with other forecasts or real-time data, to issue early warning alerts and weather warnings one to two hours before the impact of severe weather, so that the public can make advance preparations.

The SMG continued to enhance its meteorological services, launching a new “Weather Outlook” service on 20 November 2025. This service provides a concise overview of weather system changes and tropical cyclone information along the Guangdong coast for the coming week, helping the public to gain a clearer understanding of weather conditions and the key potential areas of concern.

On 10 December 2025, the SMG launched the “Temperature Drop Alert” and “Apparent Temperature” services. The former forewarns the public of sudden, short-term drops in temperature, enabling them to prepare accordingly; the latter provides real-time meteorological information that better reflects how the weather feels to the human body. Also, the icons for cold and warm weather alerts have been optimised, to make the information clearer and more intuitive.

In 2022, the SMG formulated the “Tsunami Warning System” (effective from 1 January 2023) and conducted a tsunami disaster risk assessment, to provide technical support for civil defence contingency plans.

The SMG has established the Aviation Meteorological Services at the Macau International Airport to provide aviation weather services for airport operators and flight crews. All international flights departing Macao can receive the most up-to-date, international standard aeronautical meteorological documents via the Aviation Weather Information System (AWIS). In 2025, the system typically operated at 100 percent efficiency.

The SMG promotes meteorological science through its Instagram account SMG Macau, which was launched in 2023, and its WeChat video channel SMG Macau, which was launched in 2025, and collaborates with the Zhuhai Meteorological Bureau to produce educational videos for broadcasting at the Zhuhai–Macau Port.

The SMG received group visits and invited members of civil protection authorities and different social organisations on field exchanges. During the year, there were 93 visits and two exchange sessions, with a total of about 2,476 visitors. In addition, the SMG organised a wide range of activities, including the “Weather Fun Day” and parent-child activities, which attracted 905 participants; various competitions, including the “Little Weather Reporter Competition” Macao region trial and the Cloud Art Drawing Contest; and 20 drama performances in schools, with an accumulated total of 2,419 participants.

To keep the public informed of potential flooding areas and flood heights during various storm surge warnings, the SMG has posted and regularly updated the Storm Surge Alert labels on the 132 Civil Protection CCTV poles in low-lying areas, which are in conspicuous locales at over 21 entrances and exits of public car parks operated by the Transport Bureau, outside the entrances of over 52 social service facilities operated by the Social Welfare Bureau, and the water level monitoring stations of the SMG.

Monitoring Network

Regarding weather monitoring, in 2025 the SMG added a new weather monitoring station at Lotus Bridge, bringing the total to 20 weather monitoring stations, 17 of which provide real-time meteorological information to the public and are located in key locations around Macao and on the cross-harbour bridges, forming an Automatic Weather Station Network that collects weather data 24 hours a day, and shares the information of Taipa Grande using the BUFR code through the Global Telecommunication System (GTS) every hour, while information from three weather stations – Mount Fortress, Taipa Grande and Ka Ho, is released every 15 minutes using the international SYNOP code. Also, the Pearl River Delta Real-time Automatic Weather Station Network was jointly established to exchange meteorological data by the SMG, Guangdong Meteorological Bureau and Hong Kong Observatory.

Regarding meteorological telemetry, the SMG has two ground meteorological reception and processing systems to receive Chinese FY-2 and FY-4 satellite information and Japanese Himawari satellite information; two sets of lightning detectors; a set of centralised lightning information processing systems (the Lightning Location Network in the Pearl River Delta jointly established with Guangdong Meteorological Bureau and the Hong Kong Observatory); one low-level wind profiler; one microwave radiometer; two cloud height meters; and three visibility measuring devices. In addition, the SMG joined hands with the Zhuhai Meteorological Bureau to install one S-band dual-polarisation Doppler weather radar, four X-band phased array weather radars, two low-level wind profilers, and one microwave radiometers in Zhuhai, to monitor weather conditions over Macao and nearby regions.

In terms of meteorological analysis systems, the SMG owns an integrated analysis system for tropical cyclones and storm surges, an ensemble system for predicting storm surges in Macao, and

a weather nowcasting system, to analyse the impacts of tropical cyclones and storm surges, and monitor real-time changes in thunderstorms. In addition, the SMG is actively applying technologies such as artificial intelligence and big data analysis to optimise its forecasting systems and improve its ability to issue warnings for high-impact weather events.

The Water Level and Tide Monitoring Network managed by the SMG provides round-the-clock real time data on flooding and tides in flooding black spots and coastal area. Following the addition of the Caminho das Hortas Water Level Monitoring Station in 2025, the SMG operates a total of 21 land water level monitoring stations at flooding black spots in various districts of Macao (with 19 of these stations providing real-time flooding information to the public), and two tide monitoring stations along the coast.

Air quality monitoring

Regarding air quality monitoring, the SMG has established a fully automated air monitoring network to effectively measure major pollutants that jeopardise Macao's air quality. Macao has six automatic air quality monitoring stations, including an automatic monitoring system at the Taipa Grande Station for measuring 57 volatile organic compounds in the ambient environment.

Seismological monitoring

The SMG has a seismological monitoring station in its Taipa Grande headquarters on Taipa, equipped with a deep shaft (30 metres below ground level) digital seismograph and a strong motion seismograph. In addition, a national seismic information sharing portal was introduced, to receive earthquake information for the entire country. An earthquake-induced tsunami forecasting system was also introduced.

Environmental radiation monitoring

The SMG has set up radiation monitoring stations in its headquarters in Taipa Grande and in the University of Macao, mainly for detecting Gamma radiation dose rates in the atmosphere and announcing the results on the website. A baseline survey on Macao's atmospheric radiation began in 2013. Regular monitoring of Macao's atmospheric radiation is then conducted every year in different districts. Based on the monitoring results, the Atmospheric Environmental Radiation Monitoring Annual Report for the year was compiled and published.

Regional and International Cooperation

The SMG is a member of the WMO. It actively participates in promoting technology, research, training and applications relating to meteorology. Every year, it sends delegations to meetings, seminars, workshops and training programmes arranged by the WMO, the Chinese mainland and overseas meteorological agencies and academic organisations.

The SMG is also a member of the ESCAP/WMO Typhoon Committee. The committee secretariat moved to Macao in 2007.

During 2025, the SMG hosted the ESCAP/WMO Typhoon Committee 20th Integrated Workshop/ High Level Forum, and actively participated in domestic and international meteorological conferences and exchange activities. Domestic activities included the Seminar on Meteorological Science and Technology and the Meeting on Cooperation in Meteorological Operations, which are held on a rotating basis by Guangdong, Hong Kong and Macao. International activities included the United Nations Climate Change Conference, the World Meteorological Congress, SERCOM Ext 2025, the Typhoon Committee Session, the ICAO Meteorological Working Group Meeting, the Forum on Regional Climate Monitoring, Assessment and Prediction for Asia, the Asia Oceania Meteorological Satellite Users' Conference, and the China ASEAN Meteorological Cooperation Forum.

The SMG actively participates in technical conferences related to geophysics and air quality, including the Guangdong-Hong Kong-Macao Air Quality Monitoring Network, the Earthquake Trend Consultation Meeting, and the Earthquake Science and Technology Seminar. In 2025, the SMG and the Guangdong Provincial Earthquake Bureau jointly established an earthquake monitoring station in the Guangdong-Macao In-depth Cooperation Zone.

Air Quality

Population density, scarcity of land, narrow streets and busy traffic all affect Macao's air quality. However, this is offset to some extent by the low discharge of industrial pollutants. The air quality is therefore generally quite good. Every winter, a comparatively high level of airborne pollutants raises the air pollution index; while in summer the air quality improves, with lower pollution index readings, as the convective precipitation of the tropical climate dispels pollutants.

The SMG revised the definition of the Air Quality Index (AQI) in accordance with the published "Macau Environmental Quality Standards - Ambient Air Quality Standards (trial version)"; the revised AQI was officially adopted from 1 January 2021. The new index further restricts the concentrations of pollutants corresponding to each air quality level, and improves the related preventive measures, and is disseminated hourly via the SMG website and mobile app.

Name changes for air quality monitoring stations	
New names	Original names
Conselheiro Ferreira de Almeida	Macao peninsula roadside
Bairro de Tamagnini Barbosa	High-density residential area of Macao peninsula
Baixa da Taipa	High-density residential area of Taipa island
Taipa Grande	Taipa ambient
Seac Pai Van	Coloane ambient
Ka-Ho	Ka Ho roadside

Percentage Distribution of Air Quality Levels by Air Quality Monitoring Station in 2025

Monitoring Station	Good	Acceptable	Poor (days)	(Very poor) (days)	Severe (days)
Conselheiro Ferreira de Almeida (Roadside)	61.4%	33.2%	4.7% (17 days)	0.5% (2 days)	0.0% (0 days)
Bairro de Tamagnini Barbosa (High Density Residential Area)	51.0%	45.5%	2.7% (10 days)	0.5% (2 days)	0.0% (0 days)
Baixa da Taipa (High Density Residential Area)	58.1%	37.8%	3.6% (13 days)	0.3% (1 day)	0.3% (1 day)
Taipa Grande (Ambient)	44.7%	51.0%	3.6% (13 days)	0.5% (2 days)	0.3% (1 day)
Seac Pai Van (Ambient)	50.4%	46.8%	2.2% (8 days)	0.3% (1 day)	0.3% (1 day)
Ka-Ho (Roadside)	37.0%	56.2%	6.0% (22 days)	0.5% (2 days)	0.3% (1 day)

Note: Due to missing data for certain dates, and rounding, the total percentage may not add up to exactly 100 percent.

In 2025, the main pollutants affecting Macao's air quality were fine particulate matter (PM_{2.5}), ozone (O₃) and inhalable particulate matter (PM₁₀). In April, Macao was affected by a rare dusty weather event, resulting in very poor and severe air quality. In December 2025, there were eight days when at all stations the 24-hour average concentration of fine particulate matter (PM_{2.5}) exceeded the reference limit, making it the month with the most days with poor or worse air quality during the year. The Ka Ho roadside monitoring station recorded the most days with the concentration of air pollutants exceeding the reference limit, totalling 25 days and representing 6.8 percent of the year. Overall, the air quality standards ("good" to "acceptable") were met on over 90 percent of days (330 days) across various districts in 2025.

Average Pollutant Concentrations in 2025

Monitoring Station	Respirable suspended particulates (µg/ m³)	Fine suspended particulates* (µg/ m³)	Sulphur dioxide (µg/ m³)	Nitrogen dioxide (µg/ m³)	Ozone (µg/ m³)	Carbon monoxide (mg/m³)
Conselheiro Ferreira de Almeida (Roadside)	37.3	19.1	4.4	42.0	37.2	0.9
Bairro de Tamagnini Barbosa (High Density Residential Area)	40.7	16.7	3.3	41.1	51.0	0.6
Baixa da Taipa (High Density Residential Area)	36.2	18.9	5.4	26.0	47.5	0.7
Taipa Grande (Ambient)	32.0	16.3	4.6	22.2	66.5	0.5
Seac Pai Van (Ambient)	32.3	15.8	4.2	22.5	59.1	0.4
Ka-Ho (Roadside)	37.8	16.9	4.8	22.4	72.6	0.6

Air Pollution Index

Air quality index	0 ~ 50	51 ~ 100	101 ~ 200	201 ~ 300	301 ~ 400	401 ~ 500
Air quality level (defined by Macao standards)						

Environment

Environmental Protection Bureau

The Environmental Protection Bureau (DSPA) is a public department in charge of studying, planning, executing, coordinating and promoting environmental and energy-related policies.

Advisory Council on the Environment

The Advisory Council on the Environment is chaired by the Director of the Environmental Protection Bureau. Members include a maximum of seven representatives of other entities or government departments, and a maximum of 20 other prominent social figures in the environmental protection field.

The major responsibility of the Advisory Council on the Environment is consulting different social sectors regarding Macao's environmental protection, and providing recommendations on the study, formulation, implementation, coordination and promotion of environmental policies.

Noise

The noise pollution in Macao mainly stems from urban characteristics – such as population density and busy traffic, narrow streets and the large number of high-rise buildings. The DSPA has continued promoting Environmental Noise Prevention and Control regulations, and has co-organised legal briefings with the Public Security Police Force to raise public awareness of compliance with the law.

Environmental Noise Complaints received by the DSPA and CPSP		
	No. of cases	Year-on-year change
Environmental Protection Bureau	1,704	-10.3%
Public Security Police Force	8,478	-2.0%
Total	10,182	-3.5%

Complaint category	No. of cases	Percentage
Public places	3,763	37.0%
Activities of daily life and domestic pets in residential buildings	3,302	32.4%
Industrial, commercial and service sectors	1,642	16.1%

Environmental Noise Monitoring Network

In order to assess the ambient noise level in different districts, the DSPA has set up six environmental noise monitoring stations – three on the Macao peninsula, one on Taipa island, one in the COTAI reclamation area and one in Coloane. These monitoring stations conduct round-the-clock monitoring of ambient noise, road traffic noise, and noise from the residential zones, by means of an automated network. The data is published on a monthly basis on the Environmental Protection Bureau's website and in the Environmental Geographic Information System. The 2024 Annual Report on Data Collected by Environmental Noise Monitoring Stations of Macao was published in May 2025.

In addition, preliminary work on an environmental noise survey commenced in 2025.

Water Quality and Wastewater Treatment

Water Quality

Situated at the mouth of the Pearl River, Macao occupies a peninsula and nearby islands facing Lingdingyang to the east and the South China Sea to the south; there is a wide expanse of water. Water exchanges resulting from tidal flows dilute pollutants entering the area. The Inner Harbour to the west of Macao is a favourite berthing place for Zhuhai and Macao fishing boats. The sluice of the Zhuhai Qianshan River lies upstream of the Inner Harbour channel, and when this is closed the area is partially blocked off. The poor exchange of its waters with the sea results in conditions in which pollutants can accumulate. When the sluice is open, Macao's water quality is determined by the quality of the water in the Qianshan River. Pollutants that have accumulated will then flow to neighbouring waters.

Water Quality Monitoring Network

Based on the geographic features of Macao, the Public Health Laboratory of the Health Bureau adopts Category 3 Water Quality Standard of the Sea Water Quality Standard of China (GB3097-97), to assess individual indicators, nutrition indicators and comprehensive indicators of the water quality at each monitoring station.

In 2025, the Environmental Protection Bureau continued monitoring the water quality and sedimentation in marine areas that are under Macao's management, to enable a more comprehensive understanding of the marine environment. In addition, the Environmental Protection Bureau has set up three automatic environmental water quality monitoring stations – at Ilha Verde Dockyard, Inner Harbour and Cotai Nature Reserve. Round-the-clock monitoring of water quality is conducted through an automated network. The data is published monthly on the website of the Environmental Protection Bureau and in the Environmental Geographic Information System. The 2024 Annual Report on Data Collected by Automatic Water Quality Monitoring Stations of Macao was published in May 2025. In addition, in response to the remediation of the Canal dos Patos, the bureau took over management of the two automatic water quality monitoring stations in Canal dos Patos, to constantly monitor the water quality in the area.

Monitoring Drinking Water Quality

The Laboratory Division of the Municipal Affairs Bureau is responsible for the public water supply network; inspecting the water quality of public water sources and wells; and – if necessary – recommending the closure of these facilities in the public interest. It regularly monitors the quality of water processed by the water supply company, and the public water supply networks and reservoirs in the territory, to verify whether the quality complies with the requirements stipulated in the Decree-Law No. 46/96/M – Rules and Regulations on Water Supply and Drainage in Macao. It collects samples from different water supply points every day and conducts tests on substances such as physicochemical indicators, organic substances, harmful ions, heavy metals, microorganisms,

pesticide residues, and radioactive substances. In 2025, a total of 3,277 samples and 50,169 items were examined, and all the results complied with the required standards, demonstrating that the water quality of the public water supply system is safe and stable.

Since being awarded the ISO/IEC 17025 Certificate of Laboratory Accreditation by the China National Accreditation Committee for Laboratories (CNAL; now China National Accreditation Service for Conformity Assessment) in 2003, the Laboratory Division has enhanced its analytical performance and its quality management system. The laboratory also continued to participate in proficiency tests held by renowned organisations in the Chinese mainland and countries including the United States, the United Kingdom and Australia. The laboratory's inspection technology has fulfilled international requirements. Currently, it possesses 93 and 212 accreditations for water quality certificates and various food certificates, respectively.

Wastewater Management

The six sewage treatment facilities in Macao – the Macao Peninsula Sewage Treatment Plant, Taipa Sewage Treatment Plant, Coloane Sewage Treatment Plant, the Cross-boundary Industrial Zone Sewage Treatment Plant, the temporary sewage treatment plant near the Outer Harbour Ferry Terminal, and the Avenida Marginal do Lam Mau temporary sewage treatment plant – can handle 374,000 cubic metres of sewage per day. In 2025, upgrading works for the Coloane Sewage Treatment Plant commenced, while the design and construction work for the Sewage Treatment Plant on the Artificial Island were also launched.

In 2025, the Macao Peninsula Sewage Treatment Plant handled 61,656,308 cubic metres of sewage; Taipa and Macau International Airport Sewage Treatment Plants handled 8,476,880 cubic metres; Coloane Sewage Treatment Plant handled 19,871,129 cubic metres; the Cross-boundary Industrial Zone Sewage Treatment Plant handled 955,341 cubic metres; the temporary sewage treatment plant near the Outer Harbour Ferry Terminal handled 3,676,986 cubic metres; the temporary Avenida Marginal do Lam Mau Sewage Treatment Plant handled 2,218,683 cubic metres.

To improve coastal water quality, the temporary sewage treatment plant near the Outer Harbour Ferry Terminal and the temporary sewage treatment plant at Avenida Marginal do Lam Mau have commenced operations.

Waste Management

Companhia de Sistemas de Resíduos, Lda. (CSR) has been contracted to undertake Macao's household waste collection and conveyance, urban cleaning operations and the cleaning and maintenance of public waste containers, under the Government's supervision. In 2025, the CSR collected about 237,453 tonnes of household waste in Macao.

To help implement the Macao Solid Waste Resources Management Programme (2017-2026), the Environmental Protection Bureau has continued to promote the policy of "Waste reduction at source and waste recycling".

In terms of plastic reduction, in addition to the ongoing implementation of Law No. 16/2019 – Restrictions on the Provision of Plastic Bags, the Environmental Protection Bureau continued to

foster awareness of plastic reduction in the community through a series of activities such as the Green Schools Project, the Plan for Recognition of Eco-Supermarkets, the Macao Green Hotels Award, the “Reducing Plastic is Very Easy”, “Bringing Your Own Water Bottles is Easy” campaigns, and the Scheme for Food Waste Reduction during Macao Food Festival. To further promote plastic restriction measures, the policy of regulating disposable plastic tableware has been implemented in phases, banning the import of disposable styrofoam utensils, non-degradable plastic disposable drinking straws, drink stirrers, knives, forks, spoons, plates, cups and disposable styrofoam food trays to the MSAR. In addition, Chief Executive Order No. 163/2025, which prohibits the import of single-use plastic cotton buds, balloon sticks and inflatable sticks, has come into effect from 1 January 2026.

In terms of waste recycling, the Environmental Protection Bureau has established over 4,000 recycling points across Macao, including the Environmental Protection Fun corners, the Environmental Protection Fun clean collection spots, the Environmental Protection Fun collection points, mobile recycling vehicles and smart recycling machines, and the “Recycling in Buildings is Easy” programme, to provide more accessible recycling channels. In recent years, sorted recycling bins have been placed in suitable public housing estates, providing recycling services for paper, plastic, metal, food waste, electrical appliances, batteries, glass and used clothing. After pre-treatment, the recyclables are transported to neighbouring regions for recycling and are not sent to incineration centres for burning.

Food waste from government departments, schools, hotels, supermarkets, banks, hospitals, associations and institutions was collected through the Food Waste Treatment Demonstration Project. The Restaurant Food Waste Collection Pilot Project collects commercial and industrial food waste from small and medium-sized restaurants. Household food waste was collected through the Environmental Protection Fun corners, mobile recycling vehicles, Environmental Protection Fun clean collection spots and smart recycling machines installed in two housing estates. By the end of 2025, more than 181 tonnes of household food waste had been collected. The construction of the Organic Waste Recycling Centre also continued.

A total of 52 fixed collection points and mobile recycling points have been set up under the Electronic and Electrical Equipment Recycling Programme, and free appointment-based pick-up services are provided by the Environmental Protection Bureau. By the end of 2025, a total of about 1,170,000 items of used electronic and electrical equipment were collected. Over 266 tonnes of pre-treated circuit boards have been transported in batches to neighbouring regions for recycling and resource treatment in accordance with the Basel Convention, while the remainder has been temporarily stored at the contractors’ premises.

Over 1,300 collection points for the Used Battery Collection Scheme have been set up in various districts of Macao. By the end of 2025, over 454 tonnes of used batteries and their components had been collected through the scheme. Of these, over 229 tonnes of pre-treated disposable and lead-acid batteries have been transported to neighbouring regions for subsequent recycling and resource treatment in accordance with the Basel Convention, and 17 tonnes of battery components have been reused as resources, while the remainder have been temporarily stored at the contractors’ premises.

Over 900 collection points for the “Disposing Used Lamps is Easy” scheme have been set up by the Environmental Protection Bureau in various districts of Macao. By the end of 2025, more

than 115 tonnes of used lamps and their components had been collected through the scheme. Of these, about 41 tonnes of pre-treated lighting tubes had been transported to neighbouring regions for subsequent recycling and resource treatment in accordance with the Basel Convention, and 34 tonnes of lighting tube components have been reused as resources, while the remainder have been temporarily stored at the contractors' premises.

Programmes such as the “Recycling in Buildings is Easy”, “Recycling Glass Bottle is Easy”, “Recycling Used Clothes is Easy”, “Recycling Red Packets is Easy” and “Recycling Moon Cake Boxes is Easy”, together with facilities such as smart recycling machines and mobile recycling vehicles, promoted the recovery and reutilisation of waste resources across the community.

Macao Waste Incineration Centre

Macao Incineration Centre is responsible for processing all Macao's solid waste. It comprises three plants with eight processing lines and a total processing capacity of 3,000 tonnes of waste per day. During 2025, the centre processed 614,528 tonnes of solid waste, including 532,077 tonnes of municipal solid waste. The waste heat produced during the treatment of the municipal solid waste can be recovered and used for power generation. The centre can generate up to 56.7 megawatts per hour of electricity at full load, of which 15 megawatts are used for operations, with the remaining power transferred to the public grid. During 2025, the incineration centre supplied 213,134 units (10,000 kilowatt hours) of electricity to the public grid.

Special and Hazardous Waste Treatment

The new Special and Hazardous Waste Treatment Centre within the Macao Waste Incineration Centre is designed to treat special wastes that are produced in Macao, mainly by using superheating techniques to treat waste materials that cannot be processed by the incineration centre, including discarded tyres, solid and liquid hazardous waste, carcasses of animals, slaughterhouse waste, medical waste, and other special and hazardous wastes. In 2025, the waste treatment centre processed a total of 3,983 tonnes of waste (including medical waste).

Treatment of Construction Waste

Since the construction waste landfill commenced operations in 2006, it has been mainly used for the disposal of non-combustible inert solid waste produced through excavation, demolition, and construction. The solid waste includes debris, cement blocks, soft soil, marine clay and furnace slag. In 2025, about 1.36 million cubic metres of construction waste were disposed of.

As the construction waste landfills have reached their full capacity, the MSAR Government has introduced an administrative regulation for the Construction Waste Management System, and adopted measures including controlling the increase in volume, minimising the waste and reusing as much as possible. In June 2025, the MSAR Government signed a cooperation agreement with the Ministry of Ecology and Environment to dispose of inert construction and demolition materials (including shield tunnel spoil and soft soil) that comply with national regulations in Chinese mainland waters, while materials that do not meet the requirements must still be disposed of in Macao.

Legislation and Pollution Control

Legislation enacted in 2025 covering environmental issues included:	
1	Amendment to the Annex to the Executive Order No. 200/2021 – Approval of the Sale Price, Co-contribution, Guarantee and Costs of Natural Gas for the Wholesale Supply of Natural Gas for Public Services (Executive Order No. 101/2025)
2	Prohibition of the Import, Export and Transit of Certain Mercury-Containing Products Listed in the Minamata Convention on Mercury and Related Amendments (Executive Order No. 109/2025)
3	Prohibition of the Import of Single-Use Plastic Cotton Swabs, Stick Balloons and Inflatable Pumps into the Macao Special Administrative Region (Executive Order No. 163/2025)
4	Substitution of Annex to By-law No. 30/2016 - Limit for Exhaust Gas Emissions from In-use Vehicles and Methods for Measurements, as amended by Executive Order No. 101/2024 (Executive Order No. 178/2025)
5	Substitution of Annex to By-law No. 30/2016 - Rules Concerning Unleaded Petrol and Light Diesel for Vehicles (Executive Order No. 210/2025)
6	Plan for Granting Financial for the Scrapping of Gasoline-powered Motorcycles and Their Replacement with New Electric Motorcycles (Order No. 39/2025 of the Secretary for Transport and Public Works)
7	Plan for Granting Financial Support for the Scrapping of Old Diesel-Powered Vehicles (Phase III) (Order No. 51/2025 of the Secretary for Transport and Public Works)

International Treaties

Newly applicable international treaty in 2025:	
1	Amendment to the Minamata Convention on Mercury (Chief Executive Notice No. 7/2025)

Environmental Protection and Energy Conservation Fund

The Government established the Environmental Protection and Energy Conservation Fund through By-law No. 21/2011, and on 26 July 2021, By-law No. 25/2021, amending Administrative Regulation No. 21/2011, was promulgated to improve the operation and management of the Environment and Energy Conservation Fund.

In 2025, the Environmental Protection and Energy Conservation Fund continued processing the disbursement of grants under the Recycling Industry Equipment and Vehicle Incentive Scheme, and carrying out the related monitoring work.

To improve Macao air quality and support the dual carbon goals of the country, in 2022 and 2023 the Environmental and Energy Conservation Fund launched Plan for Granting Financial for the Scrapping of Obsolete Motorcycles and Their Replacement with New Electric Motorcycles, and the Plan for Granting Financial Support for the Scrapping of Old Diesel-Powered Vehicles – both

involving two phases – to encourage owners to replace their older, more polluting motorbikes with new electric motorbikes, and to phase out older and more polluting diesel vehicles. The second stages of the two schemes were divided into two phases, and the target groups were expanded to encourage more owners to scrap their old and more polluting motorcycles and diesel-powered vehicles.

To improve Macao air quality and support the country's dual carbon goals, in 2022 and 2023 the Environmental and Energy Conservation Fund implemented the Plan for Granting Financial Incentives for the Scrapping of Obsolete Motorcycles and Their Replacement with New Electric Motorcycles in two phases. The second period for applications in the second phase closed on 31 May 2025, with a total of 1,989 applications received. The vetting process was completed in June, involving a total of approximately 6.9 million patacas. By the end of 2025, 1,960 old motorcycles had been phased out, and 1,945 new electric motorcycles had been registered.

In 2025, the Environmental and Energy Conservation Fund implemented a new phase of the Plan for Granting Financial Incentives for the Scrapping of Petrol-powered Motorcycles and Their Replacement with New Electric Motorcycles, with applications accepted from 15 October. The scope of the scheme was expanded to cover all petrol-powered motorcycles in Macao. By the end of 2025, 962 applications had been received, of which 745 had been approved, involving a total amount of approximately 2.6 million patacas, with 428 petrol-powered motorcycles phased out and 248 new electric motorcycles registered.

The Environmental and Energy Conservation Fund launched the Plan for Granting Financial Support for the Scrapping of Old Diesel-Powered Vehicles in two phases during 2022 and 2023. The second period for applications during the second phase closed on 31 May 2025, with a total of 230 applications received. The vetting process was completed in June, and involved approximately 14 million patacas. By the end of 2025, 211 old diesel-powered vehicles had been phased out. Building on this success, the third phase of the plan was launched in 2025, and opened for applications on 5 January 2026. The scope of eligible vehicles has been further expanded, to encourage the scrapping of older diesel-powered vehicles with higher pollution levels.

Promotion of Environmental Protection Education

With the theme “Building a Low Carbon Macao and Embracing a Green Life”, the Environmental Protection Bureau organised 433 diverse events during 2025, attended by 575,355 participants.

The Environmental Protection Bureau continued to conduct publicity in the community to enhance merchants' and the public's understanding of the Restrictions on the Provision of Plastic Bags law; and actively establish a platform to encourage merchant to donate the plastic bag charge to environmental and social welfare organisations.

In order to implement the Minamata Convention on Mercury, the MSAR Government restricted the import and export of relevant products in 2025. To this end, the Environmental Protection Bureau organised two briefing sessions to inform the industry and the public about the scope of the regulations.

Since its launch, the Environmental Fun Bonus Points Scheme has gained popular support from the public. By the end of 2025, there were more than 50,000 members. Environmental Protection Fun -waste reduction and recycling encouraged the public to participate in sorting and recycling waste,

while Environmental Protection Fun -environmentally-friendly moves encouraged the community to participate in a variety of green behaviour, including through the coordination of a group of frontline teams (Environmental Protection Fans) to assist in guided tours of Cotai Nature Reserve.

In 2025, the Environmental Protection Bureau set up two additional Environmental Protection Fun corners, at Avenida Marginal do Lam Mau and Avenida de Venceslau de Moraes, increasing the total number of Environmental Protection Fun corners to ten, alongside 62 community recycling stations and 67 Smart Recycling Machines across Macao. The Environmental Protection Fun corners regularly organise guided tours for the public, performing an environmental education function.

The Environmental Protection Bureau organised a series of environmental education events and the Green School Award Project through the Green School Project. In 2025, 58 schools participated in the Green School Awards Project, with 43 schools receiving awards.

The 2024 Macau Green Hotel Awards were awarded to 17 award-winning hotels, bringing the total number to 58 (the awards are valid for three years). About 60 percent of green hotels have conducted carbon audits, with an accumulated energy saving of 370 million kilowatt-hours, equivalent to a reduction of 220 million kilogrammes of carbon emissions. Nearly 540 electric vehicle charging bays were installed, representing an increase of over 80 percent compared to the previous year. All green hotels have implemented resource recycling, with an accumulated recycled amount of over 82,000 tonnes; and over 60 percent of the green hotels have implemented food waste recycling.

The Environmental Protection Bureau held the Scheme for Recognition of Eco-Supermarkets 2024 in collaboration with the Municipal Affairs Bureau, the Consumer Council, the Macau Merchandise Merchants Industry Chamber of Commerce and the Macau Union Suppliers Association, with a total of 37 supermarkets receiving awards, resulting in one gold award, 18 silver awards and 13 bronze awards.

The award-winning supermarkets have continued to implement carbon reduction measures such as plastic wrapping reduction, waste reduction and recycling as well as energy saving and emissions reduction, and participating in environmental activities, in order to promote the culture of green consumption.

The Environmental Protection Bureau also encourages all sectors of society to implement waste reduction at source through campaigns such as “Cherishing Food is Easy”, “Reducing Plastic is Easy” and “Bringing Your Own Reusable Water Bottle is Easy”.

Also, the bureau promoted environmental messages to the public during environmental festivals such as World Wetlands Day, Earth Day, World Environment Day, and encouraged the public to participate in environmental activities and put environmental protection into practice.

The World Wetlands Day is celebrated on 2 February. The Environmental Protection Bureau held the World Wetlands Day 2025 - Environmental Protection Fans Award Ceremony and “Recycling Red Packets is Easy” launch ceremony on 18 January 2025 at Cotai Nature Reserve.

The Government has continued supporting the Earth Hour campaign launched by World Wide Fund for Nature (WWF). Under the coordination of the Environmental Protection Bureau, government departments and enterprises turned off unnecessary lights for one hour at 8:30pm on 22 March 2025, in line with the country’s dual carbon target.

In celebration of Earth Day on 22 April, the Environmental Protection Bureau in collaboration with the Marine and Water Bureau and the Municipal Affairs Bureau organised the “Cleaning Beach is Easy” activity at Hac Sa Beach on 12 April 2025, with about 20 teachers and students joining hands to clean the beach to raise public awareness of environmental protection.

In response to World Environment Day on 5 June, the Environmental Protection Bureau invited the environmental protection departments of the Guangdong-Hong Kong-Macao Greater Bay Area, and the public authorities, associations, integrated hotels and entertainment enterprises and institutions of Macao to hold the World Environment Day 2025 Activity Series. Activities included “2025 Guangdong-Hong Kong-Macao World Environment Day Carnival”, “Lights-off for 1 Hour” campaign, “Casual Clothing in Summer for Energy Conservation” and “5% Energy Saving” lucky draw.

Regional Cooperation on Environmental Protection

In terms of international environmental cooperation, the Environmental Protection Bureau participated in the 30th Session of the Conference of the Parties to the United Nations Framework Convention on Climate Change, held in Azerbaijan, in November 2025; the 20th session of the Conference of the Parties serving as the meeting of the Parties to the Kyoto Protocol and the seventh session of the Conference of the Parties serving as the meeting of the Parties to the Paris Agreement; and the sixth meeting of the Conference of the Parties to the Minamata Convention on Mercury (COP 6) – participating together with the national delegation.

To strengthen exchanges and cooperation on environmental protection between the Chinese mainland and Macao, in January 2025, the Secretary for Transport and Public Works led a delegation to visit the Ministry of Ecology and Environment and held the third inter-ministerial liaison work conference on the Agreement on Cooperation in Environmental Protection Between the Chinese Mainland and the Macao SAR.

The Macau International Environmental Co-operation Forum and Exhibition 2025 (2025MIECF) was organised by the MSAR Government in March, with the National Development and Reform Commission, the Ministry of Science and Technology, the Ministry of Industry and Information Technology, and the Ministry of Ecology and Environment as special sponsors; the Pan-Pearl River Delta provincial/regional governments as co-organisers; and the Commerce and Investment Promotion Institute, and the Environmental Protection Bureau as official contractors. With the theme “Innovation and Green Development – Solutions to Build Beautiful Cities”, three “Green Forums” were held, inviting over 30 local and international experts to discuss green transformations, technological innovation and Pan-Pearl River Delta cooperation.

The exhibition featured five major exhibition zones and introduced, for the first time, the Debut Economy Projects Zone and the Green Future Industry Zone. The Green Public Day was also held, to promote low carbon lifestyles.

In terms of environmental protection exchanges and cooperation between Guangdong, Hong Kong and Macao, on 11 April 2025, representatives from the Environmental Protection Bureau attended the “Meeting on Advancing the Construction of the Beautiful China Pilot Zones in the Guangdong-Hong Kong-Macao Greater Bay Area” held in Guangzhou and chaired by the Ministry

of Ecology and Environment. Environmental protection departments from Guangdong, Hong Kong and Macao exchanged views on jointly advancing the construction of the Beautiful China Pilot Zones in the Greater Bay Area.

In November 2025, Guangdong, Hong Kong and Macao jointly announced the 2024 Report of the Guangdong-Hong Kong-Macao Pearl River Delta Regional Air Quality Monitoring Network, which showed that with the exception of ozone, levels of various air pollutants continued to decline significantly. In December 2025, the three regions signed the “Cooperation Agreement on the Data Management and Release Platform for the Guangdong-Hong Kong-Macao Pearl River Delta Regional Air Monitoring Network (2025–2027)”, to promote joint prevention and control of air pollution in the region.

Under the Guangdong-Macao Environmental Protection Cooperation Agreement, the two parties continued to cooperate in various areas, including joint prevention and control of ambient air pollution, management of aquatic environments, recycling scrapped vehicles and waste paper, environmental industries, publicity and education.

Regarding Hong Kong-Macao environmental cooperation, the 17th Meeting on Environmental Protection Cooperation between Hong Kong and Macao was convened in Macao in August 2025. The parties exchanged views on green transformations of buses and taxis, air quality, carbon reduction and the popularisation of electric vehicles, and discussed plans for future cooperation. In addition, in October 2025, the Environmental Protection Bureau sent a delegation to attend the Eco Expo Asia 2025, in Hong Kong.

Under the framework of the Zhuhai-Macao Environmental Protection Cooperation Agreement, the Zhuhai-Macao Environmental Cooperation Working Group Meeting 2025 was held in Zhuhai in October 2025. The two parties reviewed the cooperation projects in the past year, and exchanged views on marine pollution governance, atmospheric environment quality, communication on environmental emergencies, the environmental protection industry, environmental protection education and ecology. There were also discussions on plans for cooperation in the coming year. In addition, in June 2025, the Environmental Protection Bureau sent a delegation to attend the World Environment Day Activities 2025, held in Zhuhai.

In terms of environmental exchanges and cooperation between Hengqin and Macao, in November 2025, the Environmental Protection Bureau sent a delegation to attend the opening ceremony of the Third Hengqin Birdwatching Invitational Tournament, and continued exchanges between Hengqin and Macao regarding other environmental fields.

Environmental Protection Planning in Macao

The Environmental Protection Bureau has made progress with the various tasks involved in the Implementation of the Environmental Protection Plan of Macao (2021-2025), and in 2025 launched the next phase of planning studies to assess the current situation and prepare for the Implementation of the Environmental Protection Plan of Macao (2026-2030).

To implement the Long-term Decarbonisation Strategy of Macao, in 2025 the Environmental Protection Bureau formulated the Guidelines for Decarbonisation of Large-Scale Activities, providing recommendations on decarbonisation to event organisers and participants, and assisting

all sectors in jointly participating in decarbonisation efforts, in line with the country's dual carbon targets.

Promotion of Electric Vehicles

The Environmental Protection Bureau and relevant departments continued implementing measures to promote environmentally friendly vehicles, including the Macao Electric Vehicle Promotion Plan.

The MSAR Government has continued to improve electric vehicle charging facilities, including by upgrading all electric motorcycle charging points to dual-standard sockets compatible with both Chinese and British standards. By the end of 2025, a total of over 3,000 charging points had been installed, including 2,493 charging points for light vehicles (1,533 of which are in operation, located in 69 public car parks and six roadside locations) and 946 charging points for electric motorcycles (918 of which are in operation, located in 57 public car parks).

Regarding battery-swapping facilities, battery-swapping cabinets have been installed in public car parks, and a two-year pilot scheme for neighbourhood battery-swapping cabinets has been launched in four locations, to enhance the convenience of travel by electric motorcycle. In 2025, a new phase of the Plan for Granting Financial for the Scrapping of Petrol-powered Motorcycles and Their Replacement with New Electric Motorcycles was introduced, and the Labour Affairs Bureau and other departments jointly organised numerous training courses on the maintenance and safety of electric motorcycles and electric vehicles to support the development of the industry.

Environmental Data

In June 2025, the Environmental Protection Bureau published the Report on the State of the Environment of Macao 2024, which introduced various aspects of Macao's environment and trends reflecting ways they are changing, as well as the effectiveness of responses to environmental issues, in order to promote awareness of and participation in environmental protection among all sectors of the community.

Complaints received by the Environmental Protection Bureau in 2025:

Category	Number of cases
Noise	1,556
Air pollution	451
Noise and air	64
Noise and other	84
Air and other	61
Environmental hygiene	75
Other	122
Total	2,413

Technical advice provided at the request of other departments in 2025:

Department	Premises and projects	Numbers of cases
Tourism Office	Premises including karaoke bars, bars, hotels, restaurants, sauna and massage establishments, dance halls and health clubs	501
	Inspections before issuance or renewal of licences	169
	Technical advice	3
Economic and Technological Development Bureau	Technical advice	1
	Inspection of industrial sites	22
	Technical advice on import applications for HCFCs as “Controlled Substances” under Decree-Law No. 62/95/M	21
Land and Urban Construction Bureau	Project plans including piling foundation (environmental protection) projects and applications for extension of construction time, construction plans, expansion plans, modification of / legalisation on construction projects	223
	Maps of urban conditions	96
	Technical advice	128
Municipal Affairs Bureau	Technical advice on licensed premises	552
	Site inspections	159
	Project plans	6
	Technical advice	35
Marine and Water Bureau	Technical advice	12
Public Works Bureau	Project plans	427
	Technical advice	85
Meteorological and Geophysics Bureau	Technical advice	16
Cultural Affairs Bureau	Technical advice	39
Customs	Inspection	172
Other departments	Technical advice	49

Flora

Macao abounds in plant species. More than 1,500 species of vascular plants have been identified in Macao. These are mainly found in woodlands, parks and leisure grounds. Most of Macao's vegetation belongs to the evergreen broad-leaf woodland, tree, shrub and coastal bush groups, including such species as Rose Myrtle (*Rhodomyrtus tomentosa*), Blood-red Melastoma (*Melastoma sanguineum*), Oblong leaved Litsea (*Litsea rotundifolia* var. *oblongifolia*), Pop-gun Seed (*Bridelia tomentosa*), Hong Kong Hawthorn (*Raphiolepis indica*) and Linear Forked Fern (*Dicranopteris*). The most common species of cultivated plants are the Chinese Hibiscus (*Hibiscus rosa-sinensis*), Giant Crape-myrtle (*Lagerstroemia speciosa*), Golden Penda (*xanthostemon chrysanthus*) and Golden Trumpet Tree. Also, Macao has 104 species of bryophytes which belong to 34 genera and 63 families. Rare species include *Fissidens macaoensis*, *Kurzia sinensis*, *Phaeoceroa laevis*, *Notothylas japonica* horik, *Micromitrium* and *Vesicularia*. *Fissidens macaoensis* is a new species to science, which was officially announced in 2011. As it was discovered in Macao, its Latin name includes "Macao".

The terrestrial vegetation in Macao has a relatively diverse plant community. Types of vegetation can be identified: coniferous forests, mixed *conifer broadleaf* forests, evergreen broadleaf forests, mixed *evergreen-deciduous* plants and scrublands. Forest areas on Taipa and Coloane have undergone a compositional transformation. A firebreak was set up, and many indigenous tree species were introduced, including Melia-leaved Evodia (*Tetradium glabrifolium*), Hong Kong Gordonia (*Gordonia axillaris*), Acronychia (*Acronychia pedunculata*), Morris's Persimmon (*Diospyros morrisiana*), India Carallia (*Carallia brachiata*), Yanmin (*Dracontomelon duperreanum*), Persimmon-leaved Litsea (*Litsea monoptala*), *Michelia chapensis*, Burmese Rosewood (*Pterocarpus indicus*), Heterophyllous Winged-seed Tree (*Pterospermum heterophyllum*), Silver-back Artocarpus (*Artocarpus hypargyreus*), Pinus elliottii×Pinus oaribaea, Common Fig (*Ficus carica*), Horse-tail Pine (*Casuarina equisetifolia*), Chinese Holly (*Ilex rotunda*), *Michelia macclurei* and Chinese Guger Tree (*Schima superba*).

In addition to leafy plants that were commonly used in the past – namely the Dwarf Yellow (*Duranta repens*), Golden Leaves (*Ficus microcarpa*), Bridal Wreath (*Stephanotis floribunda*), Fukien Tea (*Ehretia monopyrena*), Cochin-china Excoecaria (*Excoecaria cochinchinensis*) and Ivy Tree (*Schefflera heptaphylla*) – colours were added to the green belts to improve greening of streets in Macao and create a better view by growing colourful flowering shrubs, such as Blackberry Lily (*Belamcanda chinensis*), Britton's Wild Petunia (*Ruellia brittoniana* Leonard), Golden Thryallis (*Galphimia glauca*), Yellow Allamanda (*Allamanda cathartica*), Purple Allamanda (*Allamanda blanchetii*), Indian Canna (*Canna indica*), Chinese violet (*asystasia gangetica*) and Chinese fountain grass (*Pennisetum alopecuroides*) in recent years. The view looks more layered with the addition of these flowers, together with trees such as Terminalia (*Terminalia mantaly* H. Perrier), Chinese Holly (*Ilex rotunda*), Chittagong Chickrassy (*Chukrasia tabularis*) and Lance-leaved Sterculia (*Sterculia lanceolata*).

Woodland Recovery

Macao was hit by strong typhoons Hato and Mangkhut in 2017 and 2018, which caused severe damage to forest ecosystems.

In the fourth quarter of 2018, with support from the Chinese Academy of Forestry of Guangdong Province, which is directly under the Forestry Administration of Guangdong Province, the Municipal Affairs Bureau commenced the first stage of woodland recovery. The recovery work was completed in two phases. In the first phase of the woodland recovery, guided by the Forestry Administration of Guangdong Province, with the assistance of Chinese Academy of Forestry of Guangdong Province, a total of 35,000 saplings were replanted or transplanted. Damaged woodland within five metres to ten metres from 11 trails was restored, covering a total area of 35 hectares. The recovery work was completed in September 2019, with a remarkable result of over 98 percent survival rate of the saplings, which bloomed and bore fruits in spring and summer 2020. The second phase of woodland recovery commenced in the fourth quarter of 2019, as planned by the Municipal Affairs Bureau, covering an area of about five hectares. In all, 5,000 saplings were replanted or transplanted. The first stage (first and second phases) of emergency ecological recovery was completed in 2020, with a total recovery area of 40 hectares and a high survival rate and good growth rate of over 40,000 seedlings planted.

The second stage of woodland ecology recovery (third to sixth phases) commenced in the fourth quarter of 2021, focusing on overall improvement and enhancement. It is expected this will be completed in about five to ten years, with the goal of restoring an area of at least 120 hectares by 2024. With the assistance of the Guangdong Forestry Science Academy, the third phase of woodland recovery commenced in September 2021 and completed in August 2022 according to the forestry design plan, and included the thinning and removal of dead trees, covering an area of about 15 hectares. In all, approximately 15,000 saplings were replanted or transplanted. The fourth and the fifth phases of woodland recovery were completed in August and November 2023, respectively, with a recovery area of 35 hectares in both phases, and about 35,000 saplings were planted during both phases. In addition, the sixth phase of the woodland recovery plan, covering 35 hectares of area, was completed in August 2024, with about 43,000 saplings of indigenous South China trees planted, thereby achieving the target of recovering a total area of 120 hectares of woodland.

After six phases of woodland recovery, over 160,000 seedlings of more than 100 species have been planted. Some of the planted seedlings have been growing for more than five years, and some trees have grown to a height of three to five metres. The ecological benefits and biodiversity of the woodland have been greatly enhanced. However, the woodland is still in the growth stage, and the damage caused by *Mikania micrantha* needs to be monitored, with this fast-growing creeper requiring ongoing clearance efforts.

Fauna

Macao is small. The development of land and expansion of urbanisation affect and damage the survival and scope of activities of wild animals. The numbers of species and populations of wild animals in Macao are decreasing. The scarcity of unpolluted waters in Macao leads to a decrease in the diversity and numbers of amphibians. The commonest species are Asian Common Toad (*Bufo melanostictus*) and Ornate Pygmy Frog (*Microhyla ornata*). In the hilly forest area of Coloane, the Municipal Affairs Bureau has constructed artificial freshwater wetlands as better habitats for amphibians.

The commonest wild mammals are bats, rats and Red-bellied Tree Squirrels. Bats mainly inhabit Coloane and Taipa. The Japanese House Bat (*Pipistrellus abramus*) and Short-nosed Indian Fruit Bat (*Cynopterus sphinx*) can be found on the Macao peninsula. The former frequents gaps between buildings and lives on mosquitoes and flies, helping to limit populations of harmful insects. The latter eat fruits in parks or woods, and may help spread their seeds, contributing to the city environment and natural environment of the woods. The Red-bellied Tree Squirrel (*Callosciurus erythraeus*) is an exotic species, which has now become established in the wild in Macao. Its lack of natural enemies makes it a threat to other animal species, notably as squirrels eat bird eggs, thus endangering birds' reproductive success. Eurasian Otters (*Lutra lutra*) have been recorded in Macao in the past, and were again found in 2024.

Reptiles, especially snakes, play an important ecological role in controlling the number of rats. The common Chinese Rat Snake (*Ptyas korros*), Oriental Rat Snake (*Ptyas mucosa*) and Asiatic Water Snake (*Fowlea piscator*) are non-venomous, while common venomous species include White-lipped Pit Viper (*Trimeresurus albolabris*) and Taiwan Cobra (*Naja atra*). Two rare species, Many-banded Krait (*Bungarus multicinctus*) and Burmese Python (*Python bivittatus*), were recorded several times in 2019. However, Macao's dense population poses an enormous threat to their dwelling and foraging areas. In addition, some people's misunderstanding and fear about snakebites have caused the number of snakes to decrease most significantly among all wild animals in Macao.

Previous studies recorded over 300 species of birds in Macao. A total of over 290 species of birds has been recorded from 2006 to the present.

There are abundant fish stocks in Macao, which can be categorised into saltwater fish, brackish fish and freshwater fish. Saltwater fish and brackish water fish mainly refer to the fish off the coast of Macao. There are approximately 200 species of these fish. Freshwater fish most need protection in the natural environment. Although the habitats of freshwater fish and amphibians are similar to each other, the former have a narrower sphere of activities. Whenever the environment is destroyed or altered by human activities, they are often affected most directly.

There are over 700 species of insects, which are widely distributed in Macao, including 150 ant species, over 100 butterfly species and more than 40 dragonfly species.

Laws Governing Nature Conservation

Macao began to enact laws and regulations on nature conservation – including the establishment of nature reserves and the protection of flora and fauna of special interest – more than 40 years ago. New by-laws were promulgated in 2004 to replace older ones. They are as follows:

- Decree-Law No. 33/81/M, gazetted on 19 September 1981; Decree-Law No. 30/84/M, amended on 28 April 1984; and Decree-Law No. 3/99/M, revised on 25 January 1999, which designated a 196,225-square-metre area of Seac Pai Van Country Park as a conservation area of outstanding educational, ecological, scenic and scientific value;
- Law No. 11/2013, approved by the Legislative Assembly on 13 August 2013, and By-law No. 31/2018 enacted on 4 May 2018, designated part of Coloane island with an altitude of

80 metres or above as a buffer zone. Under the same law, Executive Order No. 279/2025 – List of Protected Old and Valuable Trees, promulgated on 5 January 2026, provides effective protection for the listed trees.

- The Environmental Law, approved by the Legislative Assembly on 31 January 1991 and gazetted by Law No. 2/91/M on 11 March 1991, which set out general guidelines and basic principles for the formulation of environmental policies;
- General Regulations Governing Public Places (By-law No. 28/2004) enacted on 28 July 2004, which established general principles for behaviour to be observed when using and enjoying public places; and
- By-law No. 15/2022, amending Sanitary and Phytosanitary Control (By-law No. 40/2004) enacted on 14 December 2004, came into effect on 16 April 2022. And from 1 January 2022 onwards, sanitary quarantine and phytosanitary quarantine will be applied to imports and transshipments of goods listed in Annex III of the constituent parts of Executive Order No. 209/2021, and implemented Chief Executive Order No. 245/2014 on the List of Regulated Quarantine Plant Pests of the Macao SAR.
- The Animal Protection Law (Law No. 4/2016) came into effect on 1 September 2016, with regulations on keeping, managing and selling animals, and the use of animals in public exhibitions and scientific applications. In addition, the Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES), the Convention on Biological Diversity, and the International Plant Protection Convention (Chief Executive Notice No. 20/2006 announces that the Convention came into effect on 20 October 2005 for the People's Republic of China, including the Special Administrative Region) have been made applicable to Macao, thus ensuring that Macao's nature conservation policies conform to international practices.
- To ensure the enforcement of the Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES) in Macao, the Legislative Assembly of the Macao SAR deliberated and passed Law No. 2/2017 regarding the convention, and the Chief Executive has formulated the Administrative Regulation No. 19/2017 in the same year, to supplement the law; and later implemented the amended Annexes I, II and III to CITES effective from 23 February 2023 by Chief Executive Notice No. 3/2024.

Nature Reserve

The Taipa-Coloane Wetland Reserve managed by the Environmental Protection Bureau is situated adjacent to the Lotus Flower Bridge in Taipa and Coloane. It has a total area of 55 hectares, including a 40-hectare bird foraging area that is regarded as zone two of the reserve, on the west coast of reclaimed area between Taipa and Coloane. Next to this zone is a 15-hectare bird habitat, regarded as zone 1 of the reserve, which provides different bird species (including the rare Black-faced Spoonbill) with suitable habitats.

As at the end of 2025, the Cotai Nature Reserve's known plant species included 327 species of planktonic algae, four species of bryophyte, 22 species of pterophyte, 11 species of gymnosperm,

and 421 species of flowering plants. Regarding animal species, 143 plankton species, 176 zoobenthos species, six species of spiders, 683 species of insects, 119 species of fish, six species of amphibians, 22 species of reptiles and 12 species of mammals were recorded. The abundant food resources have attracted 198 species of birds to forage and roost in the nature reserve, including the globally rare Black-faced Spoonbill (*Platalea minor*).

A series of events in the Cotai Nature Reserve were held monthly by the Environmental Protection Bureau, including the Cotai Nature Reserve Open Day, the “Nature School” family workshop, and bird watching in nature reserves during migratory bird seasons from November to April the following year, while Ichthyology Workshops were held in other seasons to raise public awareness of environment protection.

Country Parks

There are four country parks in Macao: Seac Pai Van Country Park, Taipa Grande Nature Park, Hac Sa Reservoir Country Park, and Ka Ho Reservoir Country Park.

Seac Pai Van Country Park

Situated to the west of Coloane, Seac Pai Van Country Park is bounded by quarries to the north, Seac Pai Van Road to the west, Estrada do Alto de Coloane to the south, and Estrada do Militar to the east, covering an area of approximately 198,000 square metres. The park was established by legislation as a reserved zone in 1981 for its educational, ecological, scenic and scientific values, pioneering nature education in Macao. In 1984, it became the first country park in Macao.

Giant Panda Pavilion

Set against a hill side in Seac Pai Van Park of Coloane, with a fan-shaped layout and an area of about 3,000 square metres, Macao Giant Panda Pavilion is designed to combine the terrain’s natural undulations with the architectural characteristics. The pavilion comprises two 330-square metre indoor activity areas and two outdoor yards with a total area of approximately 600 square metres. The appearance of the Macao Giant Panda Pavilion is designed to mimic nature, and it features green elements with leisure facilities such as pools and wooden climbing frames for the pandas.

Taipa Grande Nature Park

Taipa Grande Nature Park is on the east of Taipa island, and covers a wooded and hilly area between Ponta da Cabrita Road, Governador Nobre de Carvalho Avenue and Padre Estevao Eusebio Situ Road. It has an observation deck, a viewing pavilion, a children’s playground, a barbecue area, a circular plaza, a green promenade, a grass skiing slope, a trail and a camellia garden, while serving as a multifunctional park for relaxation, exercise, environmental protection, education, and retreat. It is also an ideal destination for Macao residents to enjoy forest scenery to the full, embrace nature and enrich their leisure time. The total area is approximately 559,000 square metres.

Hac Sa Reservoir Country Park

Hac Sa Reservoir Country Park is situated in a hilly forest area on the south-eastern slopes of the central mountain of Coloane. The park occupies 371,000 square metres between the entrance of the Grand Coloane Resort on Hac Sa Road to the east, and Chu Ku Tong pond, in front of Man Hong Un, to the south. The park is named after Hac Sa Reservoir due to this being its most distinctive geographical feature. The trail at the top of the Hac Sa Reservoir dam is temporarily closed due to safety risks.

Ka Ho Reservoir Country Park

Ka Ho Reservoir Country Park is situated on the northeast of Coloane island with an area of approximately 81.8 hectares. The park faces Ka Ho Village to the east, separated by Barragem de Ka Ho Road. Seac Pai Van Reservoir lies to its west; and the golf course and Alto de Coloane Road lie to its south. It is bordered by a road that leads to the youth challenge centre in the north; and it stretches all the way down to a wooded and hilly area by the shoreline. With Ka Ho Reservoir as its central point, the park boasts various facilities, including the Ka Ho Reservoir Trail, Northeast Trail and Little Spring; as well as barbecue, and picnic areas; an outdoor experience camp; and a freshwater-wetland ecological zone.

Population

Macao's resident population was 688,900 at the end of 2025, representing a slight increase of 600, or 0.1 percent, over the previous year. An estimated 46.1 percent of Macao's population were males, and 53.9 percent were females. The number of households at the end of the year was 207,800, representing an increase of 2,800 over the previous year.

The local population was 567,100 at the end of the year, representing a decrease of 1,600, or 0.2 percent, from the previous year.

Natural factors are among the reasons for the increase in population. In 2025, there were 2,870 new-born babies, 21 percent fewer than in 2024, and 2,424 deaths, 2.2 percent fewer than in 2024. The natural population growth rate decreased by 0.9 percentage points to 0.07 percent. The median age of mothers giving birth to their first child was 31.5 years old, representing a year-on-year increase of 0.2 years.

On top of this increase, there was a change in immigration, another factor influencing population. The net number of immigrants was 100 in 2025, largely attributed to more foreign employees residing in Macao.

Regarding the population distribution by statistical district, most residents lived in Baixa da Taipa, with 75,000 residents, comprising 10.9 percent of the total population, followed by Areia Preta New Reclamation Zone (10.5 percent) and Areia Preta and Iao Hon Districts (9.7 percent). Compared with 2024, the largest population increases were recorded in Mong Ha and Reservatorio (+2,200 people), followed by the Areia Preta New Reclamation Zone (+1,400 people).

Birth and Death

There were 2,870 newborns in 2025, representing a decrease of 737 from the previous year. The number of deaths in 2025 was 2,424, 53 less than in the previous year.

Population Ageing

Macao's population is ageing because of the increasing life expectancy. Senior citizens (aged 65 years or above) made up 15.3 percent of the population, 0.7 percentage points more than the previous year; the number of other adults (aged 15-64 years) increased by 0.1 percentage points, representing 73.1 percent of the population; the population of young children decreased by 0.8 percentage to 11.7 percent; the aging index rose to 131.0 percent. The ageing in the population of Macao people is more obvious, with 18.6 percent represented by senior citizens (aged 65 years or above), representing an increase of 1.0 percent; and a decrease of 0.1 percentage points to 67.2 percent in other adult population (aged 15 years to 64 years).

The elderly dependency ratio of the population of Macao people was 20.9 percent, representing an increase of 0.9 percent, which means there was one senior citizen for every 3.8 adults.

Identification Services Bureau

Under the Basic Law of the Macao SAR, the Macao Special Administrative Region Government is authorised by the central government to issue MSAR Passports to Chinese citizens who hold MSAR Permanent Resident ID cards, and to issue other types of MSAR travel permits to other legal residents of Macao. MSAR Passports and travel permits are valid for worldwide travel, and entitle their holders to return to Macao.

The Identification Services Bureau is under the administration of the Secretariat for Administration and Justice, and is responsible for the overall planning and work relating to the civil and criminal identification of Macao residents. It issues ID cards and certificates of criminal record, certificates to substantiate the facts stated in official record, MSAR Passports, and other travel permits to Macao residents. It also responsible for handling nationality applications from MSAR residents, receiving and handling applications for Certificate of Entitlement to Right of Abode and issuing the related certificates, arranging the registration of associations and syndicates qualified as juridical persons and issuing the related certificates, as well as other duties as vested by law.

Personal Identity Cards

Only Chinese citizens who are permanent residents in Macao with a Macao Resident ID card are eligible to apply for an MSAR Passport. A Chinese citizen who is a Macao Resident ID cardholder, but not a permanent resident of Macao and not eligible for other travel permits, may apply for an MSAR travel permit.

By 31 December 2025, the Identification Services Bureau had issued 1,047,036 MSAR Passports and 69,229 travel permits.

Under the Nationality Law of the People's Republic of China and the Interpretation by the Standing Committee of the National People's Congress on Several Questions Relating to the Application of the Nationality Law of the People's Republic of China in the Macao Special Administrative Region, any permanent resident of Macao with Chinese nationality and a Portuguese travel document may travel to other countries or regions with the Portuguese travel document as before. Therefore, such people may hold both a Macao SAR Passport and a Portuguese travel document at the same time.

The Identification Services Bureau is responsible for issuing Visit Permits for Residents of the Macao SAR to the Hong Kong SAR (also known as "Visit Permits to the HKSAR"). Residents of the MSAR who are either Chinese or Portuguese citizens and who hold a Macao Resident ID card or an MSAR Resident ID card may apply for Visit Permits to the HKSAR. The bureau had issued 470,145 such permits as at 31 December 2025.

The Identification Services Bureau is also responsible for issuing Macao SAR Resident ID cards. As at 31 December 2025, there were 759,051 Macao SAR Resident ID card cardholders. Between 1 January and 31 December 2025, 8,460 residents received Macao SAR Resident ID cards for the first time.

Nationality

Under Law No. 7/1999, the Identification Services Bureau is responsible for handling nationality applications from MSAR residents, including applications by foreign nationals or stateless persons for naturalisation; applications by Chinese citizens to renounce Chinese nationality; applications by foreigners who previously had Chinese nationality to restore Chinese nationality; applications by MSAR residents of both Chinese and Portuguese descent to choose either Chinese or Portuguese nationality; and applications by original Macao residents who are Chinese citizens with other nationalities to adopt Chinese nationality.

Between 20 December 1999 and 31 December 2025, 1,602 applications for naturalisation were approved; 586 people restored their Chinese nationality; 142 renounced their Chinese nationality; 4,307 successfully applied to adopt Chinese nationality; 198 opted for Portuguese nationality; and there were 12 applications for change of nationality.

Certificate of Entitlement to Right of Abode

A certificate of entitlement to right of abode confirms the status of a permanent resident of the MSAR. Any person who claims to have right of abode in the MSAR but does not hold a valid Macao Resident ID card or MSAR Resident ID card and who does not live in any other region of the People's Republic of China (except the Hong Kong SAR and Taiwan) must apply for a certificate of entitlement to right of abode.

Such people include Chinese citizens who have ordinarily resided in Macao for seven consecutive years before or after the establishment of the Macao SAR; children of Chinese nationality born outside Macao whose parents are Chinese nationals and permanent residents of Macao; people of both Chinese and Portuguese descent who have ordinarily resided in Macao for seven consecutive

years before or after the establishment of the MSAR; and children of Chinese nationality or children born outside Macao who have not selected a nationality but intend to reside in Macao permanently and whose parents are permanent Macao residents of either Chinese citizenship or Portuguese descent. The certificate of entitlement to right of abode indicates its date of effectiveness, prior to which holders of the certificate have no right to enter or reside in Macao.

Between 20 December 1999 and 31 December 2025, the Identification Services Bureau issued 87,933 certificates of entitlement to right of abode.

Certificate of Criminal Record

In August 1996, the Identification Services Bureau started to issue certificates of criminal record and certificates of special record for minors. The former is the sole and sufficient document to prove whether an applicant has any criminal record; while the latter is applicable to those under 16.

Between 1 January and 31 December 2025, the bureau issued a total of 77,122 Criminal Record Certificates. Of these, 61,747 were in response to public applications, and 15,375 were for agency applications. Among the 152 certificates of special record for minors that were issued, nine were to public bodies, and 143 were to minors applying through agencies.

Immigration Controls

According to the Basic Law of the Macao SAR, the Government may impose restrictions on people from other countries or regions entering, staying in, and leaving Macao. The Immigration Department of the Public Security Police is responsible for entry and exit in Macao. The MSAR Immigrant Department records the entry and exit of non-residents, as well as their passport, visa, or other relevant documents for reference; and collect biometrics for identification when necessary.

By 31 December 2025, citizens of 87 countries enjoyed visa-free access to Macao. Valid passport holders of these countries and regions may enter and stay in Macao for 14 to 90 days, while those from certain countries may stay for up to six months.

Legal Immigration

In 2025, the number of new immigrants from the Chinese mainland holding one-way permits increased by 105 from the previous year, to 3,451, with the number of new immigrants from Guangdong province increasing by 130 to 2,173, of whom, 64 percent were female and 36 percent were male. Among new immigrants, 25.4 percent were aged below 30 years, representing a drop of two percentage points.

Overstaying and Illegal Entry

In 2025, 14,246 overstayers were repatriated. They comprised 13,651 Chinese mainland citizens, 52 Taiwan region citizens, 26 Hong Kong citizens, 517 foreign nationals, and 12,678 voluntarily repatriated Chinese mainland citizens.

Civil Registration

The Civil Registry is responsible for implementing regulations relating to the civil registration of births, parentage, adoption and child custody, marriage agreements, deaths, legal certification of the deaths of missing persons, and issuing relevant certified documents.

Birth Registration

The Birth Registry is responsible for the registration of births in Macao, as well as the re-registration of births of people aged 14 or over. The Civil Registry should be verbally notified of any birth in Macao by the parents or guardians within 30 days. There were 2,899 registered births during 2025.

Marriage Registration

The Civil Registry is responsible for handling applications for marriages, approving marriage registrations, hosting ceremonies for the signing of marriage certificates and registering marriages. A total of 2,949 marriages were registered during 2025.

Death Registration

Family dependents or other relatives of a deceased person may register his or her death with the Civil Registry. There were 2,503 deaths registered during 2025.

Divorce by Mutual Consent

The Civil Registry has the authority to process divorce by mutual consent. Couples applying for divorce who have been married for over one year, with one of them resident in Macao, and who have reached agreement on maintenance payments and ownership of their residences, may submit applications to the Civil Registry. In cases in which the spouses have minor children born of the marriage, they must also reach an agreement on the exercise of parental responsibilities. There were 933 divorce applications during 2025.



Cotai Ecological Zone

The Cotai Ecological Zone is near the Lotus Bridge in Cotai and covers approximately 55 hectares, with two main zones. Ecological Zone One has two birdwatching hides, allowing the public to more closely observe the rich flora and fauna in the area. Ecological Zone Two has three artificial islets, a viewing walkway, and mangrove plants distributed across the tidal flats. The overall ecological zone is home to a diverse range of flora and fauna; its abundant food resources attract nearly 200 species of birds to forage and roost here, including the rare black-faced spoonbill. Each year during the off season for migratory birds, the MSAR Government carries out tidal flat optimisation work in Ecological Zone One, to continuously improve the living environment for waterbirds, benthic animals and fish.



