

# Fact Sheet on the Renewal of Tokyo Sea Life Park (Kasai Rinkai Suizokuen)



The Tokyo Metropolitan Government

**Updated in February 2024** 

# An aquarium that creates opportunities for people to engage with, and deepen their understanding of the ocean by connecting with it.

Tokyo Sea Life Park, which opened in 1989 within Kasai Rinkai Park, is one of Japan's leading aquariums where visitors can encounter precious sea creatures, including schools of bluefin tuna.

Since its opening, this park has assumed its official mission as a metropolitan aquarium: collecting and exhibiting a diverse array of marine creatures from around the world, preserving rare species, contributing to school education, and providing technical support to, and cooperation with, research institutions in Japan and abroad.

Now, more than 30 years after its opening, there has arisen a need to deal with the aging of Tokyo Sea Life Park's facilities and equipment. To continue to fulfill its mission as a metropolitan aquarium, loved by many, the TMG will develop a new aquarium based on the following philosophy: operating a space 'that creates opportunities for people to engage with, and deepen their understanding of the ocean by connecting with it.'

The new aquarium will not only present dynamic exhibits that deliver the beauty and diversity of marine life, but also make exhibits that show the relationship between human activities and the sea, thereby enhancing people's interest in it. It will be a place where people can learn about marine culture and current environmental issues.

Meanwhile, the current aquarium will be utilized in tandem with the new aquarium to further increase the attractiveness of the surrounding area, encircled by the sea and greenery in the park.

As a metropolitan aquarium, Tokyo Sea Life Park will continue to fulfill its social mission by serving as a bridge linking people to the sea, becoming a facility that will contribute to the realization of a sustainable society.





## **Chapter 1: History of Tokyo Sea Life Park**

The History of Tokyo Sea Life Park		5
Challenges Tokyo Sea Life Park Faces	•••••	6
Reasons for Building a New Aquarium		10
Chapter 2: What Tokyo Sea Life Park Aims to Realize		
'Restructuring the Functions' of Tokyo Sea Life Park		12
To Fulfill the 6 Functions		13
Chapter 3: The Future of Tokyo Sea Life Park          Contents of the Renewal Plan Drawn up by Private-Sector Bus	siness Entitie	s~
·	siness Entitie	
∼Contents of the Renewal Plan Drawn up by Private-Sector Bus		15
Considerations Given to Date (up to the Time when the PFI Operators were Chosen)		15 16
~Contents of the Renewal Plan Drawn up by Private-Sector Bus Considerations Given to Date (up to the Time when the PFI Operators were Chosen)  How the Project is to be Pushed Forward		15 16 17





## **Chapter 1**

The History of Tokyo Sea Life Park



#### The History of Tokyo Sea Life Park

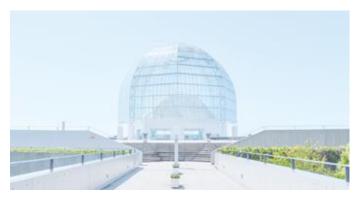
Tokyo Sea Life Park is a metropolitan aquarium originating from Japan's first aquarium, the Uonozoki (fish viewing room), which was established within the Ueno Zoological Gardens in 1882. The aquarium was planned to commemorate the 100th anniversary of the opening of the Ueno Zoological Gardens, and made its debut in 1989 to become "a place where people can interact with the sea."

The aquarium, with its distinctive glass dome, holds up its philosophy of "responding to the longing of the citizens of Tokyo for connecting with nature, and the momentum to protect it." Serving as "a place of interchange between the sea and the people," the aquarium enhances the public's interest in the ocean, and cultivates their awareness of marine nature and scientific knowledge about aquatic life, while providing fun at the same time.

At the time of its construction, Tokyo Sea Life Park set its basic goals and exhibition plans, with an emphasis on nature-based learning, to create a fanciful aquarium for the 21st century. Over the past 30 years, the eight basic goals that had been advocated have been realized through various pioneering efforts.

	Basic Objectives	Examples of Implementation
1	Create a place to develop new exhibits for the 21st century Serve as a facility to play a leading role in aquariums at home and abroad	<ul> <li>The successful implementation of on-site gluing of acrylic glass</li> <li>Adoption of a wave-making machine and the exhibits of the backyard facility</li> </ul>
2	The successful exhibit of marine creatures that are difficult to breed	<ul> <li>Established display technology for bluefin tuna, deep-sea fish, seaweed, stony coral, etc. (for the first time in Japan)</li> </ul>
3	Self-sufficiency of exhibited creatures through mating Vigorous efforts to preserve rare species	<ul> <li>The Park has received the Breeding Award (*1) 52 times (the highest number to have been won by any aquarium in Japan)</li> <li>'In-situ' conservation of red-bellied newts (*2)</li> </ul>
4	Utilization of the latest technology (information media, centralized control of breeding conditions, etc.)	<ul> <li>Adoption of central monitoring equipment to control the breeding environment</li> <li>Development of the information corner</li> </ul>
5	Integration of outdoor and indoor exhibits	Development of cross-sectional exhibits with the outside scenery of the park used to set off the exhibits
E	Cooperation with school education, and exchange with domestic and foreign research institutions	<ul> <li>Collaboration with educational institutions and other aquariums at home and abroad</li> <li>Hosting of the 4th International Aquarium Congress</li> </ul>
7	Enhancement of research functions to improve technical standards	<ul> <li>Accumulation of know-how and data concerning display and breeding techniques, and provision of such information to academic societies, etc.</li> </ul>
8	Management and operation tailored to visitors' needs	<ul> <li>Extension of opening hours and other services for visitors</li> <li>Introduction of a designated manager system (*3) (in FY2006)</li> </ul>

<sup>\*1 &</sup>quot;Breeding Award": An award given by the Japanese Association of Zoos and Aquariums to the first zoo or aquarium in Japan that has successfully bred animals, by type of species, kept in its zoo or aquarium.



Distinctive "Glass Dome"



Schools of bluefin tuna in a large tank

<sup>\*2 &</sup>quot;In-situ Conservation": Conservation of ecosystems and natural habitats to maintain and restore viable populations of groups of species in their natural

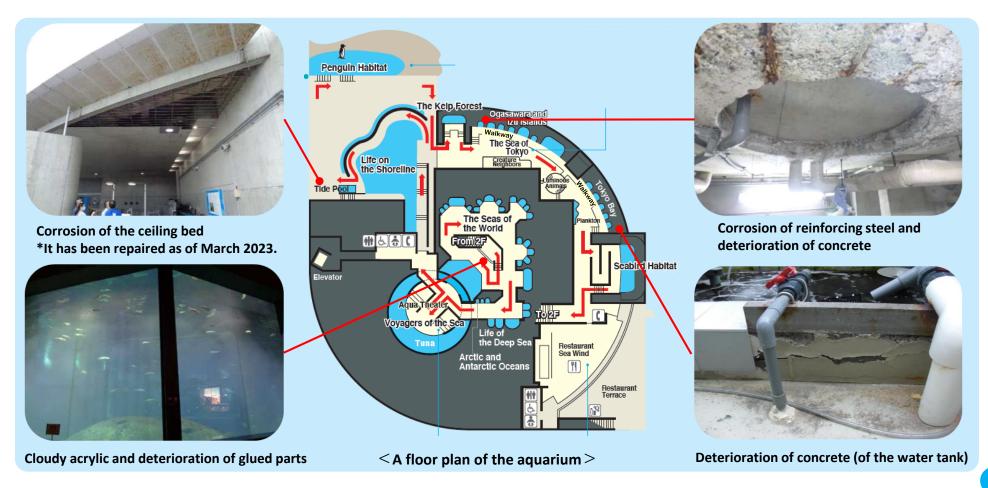
<sup>\*3 &</sup>quot;Designated manager system": A system stipulated under Article 244-2, Paragraph 3 of the Local Autonomy Law, in which private businesses, NPOs, volunteer groups, etc. manage public facilities on behalf of local governments.



More than 30 years have passed since the present aquarium opened, and various problems have arisen, such as aging facilities and equipment, a lack of breeding space and a need for barrier-free measures.

#### **Aging Facilities and Equipment**

Since the aquarium has been in operation for more than 30 years, its facilities in general, the building, piping, and various equipment in particular, have deteriorated. Although appropriate repairs have been made, large-scale renewal is called for. As an aquarium, and because of its location adjacent to the sea, salt damage has developed over time due to the circulation of seawater in the facility.

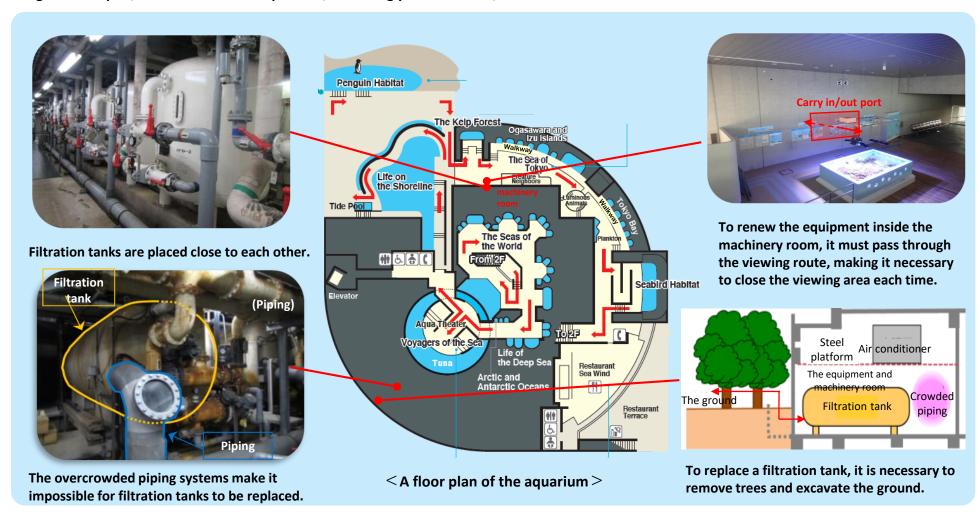




#### Renewal of Facilities, etc.

Alongside ordinary building equipment in Tokyo Sea Life Park, such as electricity and air conditioning, there are equipment and piping peculiar to an aquarium -- such as water tanks and filtration tanks -- placed close to each other.

In addition, some of the machinery rooms are arranged in places surrounded by viewing areas, so the equipment cannot be replaced unless exhibit areas are closed. Thus, it is very difficult, structurally, to secure the work space needed for renewal and to move equipment in and out. To carry out a large-scale repair, the closure of the aquarium, for a long period of time, is inevitable.





#### **The Necessity for Barrier-Free Measures**

In Tokyo Sea Life Park, some areas do not conform to barrier-free standards, etc., or have not incorporated universal design, a design that would make them more convenient for everyone to use. For example, there is only a narrow escalator at the entrance of the building, making it impossible for a stroller or a wheelchair to go downstairs.

Since there is no elevator exclusively for visitors, people with a stroller and in a wheelchair must use the elevator, that is also for business use, to enter the building. To view the exhibits inside the building, they also have to use the route that goes through the employees' walkway after they wait for the elevator in a plaza in front of the building, which is not covered with any roofing.

If an additional elevator is to be installed as a barrier-free measure, the park will likely be closed for an extended period, due to large-scale construction work. Besides this, the noise and vibration caused by the construction work may have a negative impact on living things.

On top of these, there are exhibits that visitors cannot look at without using the stairs, while a nursing room, which was installed at a later date, is located along the corridor in the backyard. Therefore, the aquarium cannot be described as a fully accessible environment, comfortable for every visitor.



The entry and exit can be made only with the use of escalators.



The waiting area for the elevator for visitors to enter is located outside the building, without roofing.



A barrier-free route that runs through employees' walkways.



A barrier-free route where a person in a wheelchair won't be able to see the display through the window as they pass by.



Exhibits that are only accessible with the use of stairs.

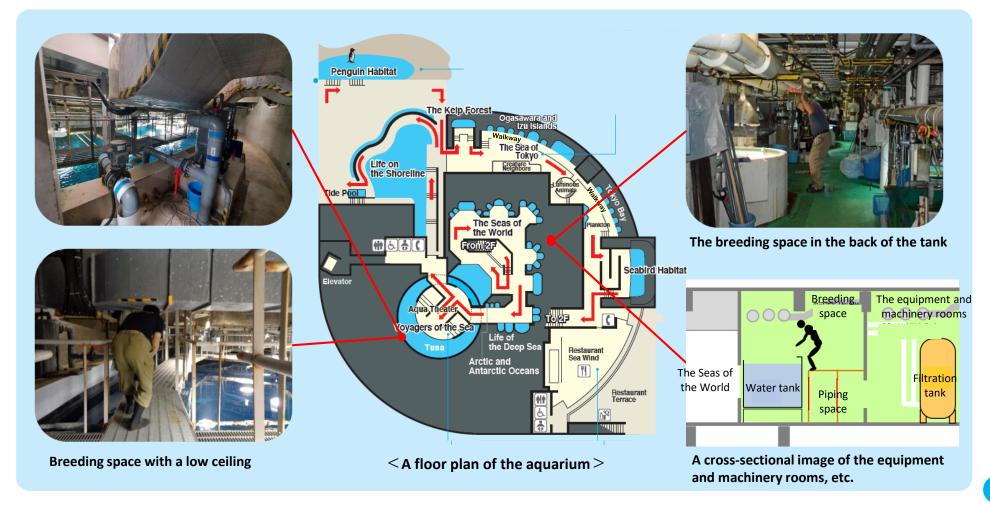


A nursing room installed later along the corridor in the backyard.

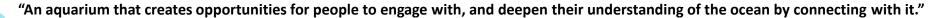


#### **A Lack of Breeding Space**

Tokyo Sea Life Park lacks the necessary breeding space to support the exhibits, both in terms of height and width, causing adverse impact such as a decline in work efficiency. Regarding the ratio of breeding space to the entire space of an aquarium, calculated on the basis of the current average value of public-run aquariums, there is a shortage of approximately 400m of breeding space. The work environment is a very important factor for the aquarium to fully demonstrate its functions. In the development of a new aquarium, we will secure the sufficient space needed to create an attractive aquarium.



#### **Reasons for Building a New Aquarium**



To realize this new philosophy, it is necessary to create exhibits that would foster a connection between people and the marine creatures they have come to see. Improved spatial presentation could enhance the effectiveness of the exhibits, so the conventional exhibits and spatial presentation must be drastically renovated.

Besides, to replace the present Tokyo Sea Life Park's aging piping, equipment, and so forth, it structurally calls for the dismantling of both the interior and exterior walls of the building and water tanks. To improve accessibility, including through barrier-free measures, the complete remodeling of the building, and a review of the visitors' flow lines, are inevitable.

In addition, the floor space will need to be expanded not only to improve the spaces for breeding marine creatures, which are fairly cramped at present, but to secure the appropriate size for the free rest areas, lecture rooms, restaurants, and other facilities, as strongly requested by visitors.

Should the present building be renovated to address these issues, it would be necessary to arrange a facility that could temporarily accommodate marine life during the construction period, or to build makeshift facilities. But securing such a facility would be quite difficult, while building makeshift facilities would require a large sum of money. Besides, the complete closure of the aquarium over a long period of time is inevitable.

However, if the functions of the present aquarium could be relocated to a building separate from the existing one, by using the plaza and other land within the park and constructing another building, the negative impact on marine life would be minimized while the period of closure can be reduced to a minimum.

For these reasons, we have decided to construct a new building separate from the existing one, to which the present functions of the aquarium will be transferred.

By constructing a new aquarium, we will solve the above-mentioned problems and ensure the performance of the facility needed for the sustainable operations of an aquarium, and the curation of an environment in which all visitors can spend their time comfortably. In addition, through these new efforts to create a space that heightens the sense of realism and visitors' expectations, providing exhibits that connect people to the sea, the aquarium will become a place where people can learn not only about the beauty and diversity of marine life but also about marine culture and current environmental issues.







Chapter 2
What Tokyo Sea Life Park
Aims to Realize



#### 'Rebuilding the Functions' of Tokyo Sea Life Park

New philosophy: "An aquarium that creates opportunities for people to engage with, and deepen their understanding of the ocean by connecting with it."

Under this philosophy, the new aquarium will work to realize a sustainable society in a long-term and continuous manner, and provide an attractive space where people can feel the sea, by conveying its culture and history.

And, to achieve this new philosophy, it is necessary to make various efforts from a new perspective, including a shift to taking actions that would emphasize sustainability. We will restructure the functions that Tokyo Sea Life Park has served to date into six features and develop them further so that all the six functions can be organically connected.

#### 1) Exhibits and Spatial Presentation

To enhance the effectiveness of the exhibits that seek to connect people with living creatures, it is important to design a "spatial presentation" that will holistically incorporate the design of various forms of tanks and their exhibit spaces.

#### **2** Collection, Breeding, and Reproduction

The collection of marine creatures is crucial to the aquarium's function that emphasizes the sustainability of wild animals, making it necessary for such an activity to be carried out in tandem with long-term breeding reproductive activities. Therefore, the collection function should be considered inseparable from those of "breeding and reproduction," which are closely related to each other. These functions support and produce the exhibits, and are thus indispensable for the operation of an aquarium.

Six organically interrelated functions

#### **4**Recreation

The word "recreation" implies "leisure." It not only implies relieving one's fatigue but also is a function that symbolizes the joy of spending time in an aquarium, by creating a relaxing environment and opportunities for visitors to learn things on their own initiative through the exhibits.

#### **5**Learning and Experiencing

"Learning and experiencing" is an important function that an aquarium can offer to visitors, by eliciting their emotions and stimulating their curiosity further through their contact with live animal exhibits, thus letting them learn and experience many things on their own initiative.

#### **6** Contribution to Environmental Preservation

"Contribution to environmental preservation" is an important function for an aquarium that should aim to protect the environment in all aspects in the future, by stimulating visitors to learn about the ocean's current situation and encouraging them to take necessary actions.

#### **3**Research and Study

Although they are rarely seen directly by visitors, research and study are important functions that support the operation of an aquarium and generate the sources of its activities, constituting the foundations of the aquarium as a whole.

#### To Fulfil the 6 Functions

## Efforts to create "a spatial presentation enhancing the effectiveness of exhibits that seek to connect people with living creatures"

Various problems have emerged as the facilities and equipment in the park have dilapidated over the past 30 years, and it is difficult to ensure accessibility for every visitor.

In order to realize our new vision for the aquarium, drastic measures need to be taken for the facility. It is essential not only to secure the level of performance of the aquarium for everyone to be able to enjoy the exhibits comfortably but to guarantee performance which is indispensable for the sustainability of an aquarium facility.

To realize these six functions, the following four viewpoints should be taken into account when considering the performance criteria required for the new aquarium facility.

#### (a) An Attractive and Convenient Facility for Everyone

- 1) We will strive to realize a high level of accessibility so that everyone, regardless of their age, nationality, or whether they are disabled or not, can use the facility with convenience.
- 2) We will ensure appropriate facility performance from the viewpoint of visitors, including safety, security, and responsiveness to their needs.

#### (c) Securing Capacity for Maintenance

We will secure the space and layout necessary for the maintenance and renovation of the facility.

#### (b) Performance to Demonstrate its Functions

- 1) We will ensure the appropriate efficiency of water treatment equipment, and performance of breeding, propagating, and quarantine, etc.
- 2) We will secure an appropriate size of free rest areas, lecture rooms, and the like, as well as their flexible usage.

The 4 viewpoints to be considered

#### (d) Reduction of Environmental Impact

We will take effective measures to reduce environmental impact, such as through the adoption of renewable energy, and also to extend the service life of the facility.





# Chapter 3 Tokyo Sea Life Park in the Future

 $\sim$ Contents of the Plan Drawn up by Private-Sector Entities  $\sim$ 



### History of Considerations to Date (up until the PFI operator was picked)

Phase	Timeline	Contents	Related URLs
	From December 2017 to July 2018	Meetings to discuss what Tokyo Sea Life Park should be like (with a total of 5 meetings) were held.	https://www.kensetsu.metro.tokyo.lg.j p/jigyo/park/zoo/kouen0037.html
	From November 2018 to December 2018	The basic concept (draft) for the renewal of Tokyo Sea Life Pak was made public, soliciting public opinions.	https://www.kensetsu.metro.tokyo.lg.j p/jigyo/park/zoo/kouen0063.html
Consideration and     announcement of the	In January 2019	The basic concept for the renewal of Tokyo Sea Life Park was made public.	https://www.kensetsu.metro.tokyo.lg.j p/jigyo/park/zoo/kouen0063.html
basic concept and the project plan	From January 2019 to February 2020	Meetings on the project plan of Tokyo Sea Life Park (with a total of 5 meetings) were held.	https://www.kensetsu.metro.tokyo.lg.j p/jigyo/park/zoo/kouen0069.html
From 2017 to 2020	From December 2019 to January 2020	The project plan (draft) for the renewal of Tokyo Sea Life Park was made public, soliciting public opinions.	https://www.kensetsu.metro.tokyo.lg.j p/jigyo/park/zoo/kouen0096.html
	In October 2020	The project plan for the renewal of Tokyo Sea Life Park was made public. (It was decided that the project would be implemented, in combination with the PFI (Private Finance Initiative) method and the designated manager systems).	https://www.kensetsu.metro.tokyo.lg.j p/jigyo/park/zoo/kouen0096.html
2. The expected	In April 2021	The expected policy of implementing the project with the PFI method was made public.	
adoption of the PFI method, with	In June 2021	Public opinions regarding the project were invited.	https://www.kensetsu.metro.tokyo.lg.j p/jigyo/park/zoo/kouen0139.html
private-sector entities to be invited, was made public.	In December 2021	The decision was made for the project to be implemented with the PFI method.	
From 2021 to 2022	In January 2022	Private-sector entities were invited to take part in the project (with public notification of bidding made).	https://www.kensetsu.metro.tokyo.lg.j p/kouen0151.html



#### **Method of Implementing the Project**

This development project will be carried out with the use of the PFI method\*, which utilizes private-sector funds and know-how to design, construct, and manage public facilities and related buildings. The PFI method allows the private sector to take the lead in providing public services, thereby ensuring the efficient and effective provision of such services.

To achieve both efficient facility management and high-quality operation, the TMG selects an organization with high expertise as a designated manager for the operation of the facility, including the breeding of marine life, which is part of the maintenance, management and operation of the aguarium, separately from the PFI operator.

\*1 PFI (Private Finance Initiative): One of the methods for implementing public works projects. This is a method of designing, constructing, maintaining, managing, and operating public facilities, etc., with the use of private-sector funds and know-how.

#### Selection of the Project Operator

OFrom October 2027 to March 2028

Oln March 2028

Open bidding based on comprehensive evaluation was conducted, selecting INOCHI Group as the successful bidder. Later, the project contract was concluded with Tokyo Seatelier Co., a special purpose company (SPC)\*, established with the contribution of a company representing the group, together with seven constituent companies of INOCHI Group.

\*2 Special Purpose Company (SPC): A company that is established by a group of multiple companies as a business entity for implementing a PFI project.

#### <u>Process Leading to the Present Phase and the Future Plans (following the selection of the PFI operator)</u>

OAugust 25, 2022	A successful bidder was chosen.	
ODecember 15, 2022	The project contract was concluded.	
OFrom December 2022 to September 2027	The designing and construction of the new aquarium are to be carried out.	
<ul> <li>From December 2022 to November 2023</li> </ul>	The basic design of the new aquarium was drawn up.	
• From December 2023 to September 2024 The working design of the new aquarium is to be drawn up.		
• From December 2022 to December 2024	Talks with the authorities concerned are to be held in accordance with relevant laws, including the Building Standards Law.	
<ul> <li>From December 2022 to June 2024</li> </ul>	Various surveys are to be carried out including those on soil and trees	

Various surveys are to be carried out, including those on soil and trees.

Preparation for the opening of the new aquarium is to be made.

The new aguarium is to be put into operation.



#### The Roles of the TMG and the PFI Operator

The TMG will monitor the level of services provided by the PFI operator, thereby creating an attractive facility. The monitoring will be conducted while obtaining advice from experts in various fields.

As to the tasks of maintenance, management, and operation of the facility, including the breeding of marine life, the TMG will select an organization with high expertise as the designated manager, separate from the PFI operator.

#### **Role of TMG**

The TMG will monitor the status of the designing, construction, building management, and so forth until the end of the project period to ensure that the PFI operator (Tokyo Seatelier Co.) provides adequate services.

#### **Role of the Private-Sector Entities**

**Tokyo Seatelier Co.** 

Tokyo Seatelier Co. will be responsible for the designing, construction, and building management of the new aquarium, as well as the operation of the restaurant and café.



**Monitoring** 

Advice

#### **Experts' Role**

The experts will provide professional advice in the fields of aquarium/museum, architecture, facilities, education, etc. to ensure efficient monitoring by the TMG.

#### Overview of the New Facility



\*The information provided here may be subject to change.

The main approach, which is 10 meters wide and connects the main gate to the main building with a gentle slope, has a canopy installed above, allowing visitors to enter the building without getting wet from the rain.

The canopy is also provided around the main building, enabling visitors to stay around it out of the rain and sun even when the building inside is crowded.

Around the main building, a plaza called "Kyosei-no-Mori," arranged with trees and walking paths, will be created, providing an environment where visitors can freely stroll through the rich greenery of the old and new aquarium and the park as a whole.

#### **Overview of the New Facility**

Building area: approx. 12,800 m

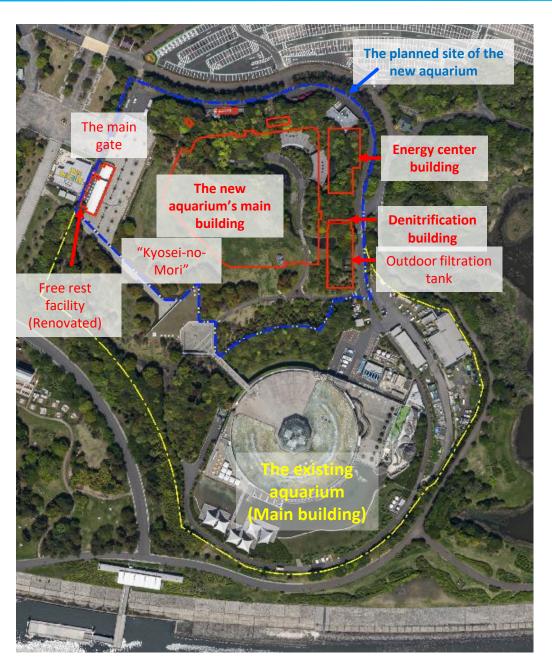
Total floor space: approx. 24,100 m

Maximum height: approx. 14 m

(Main building)

Water tank capacity: approx. 4,800 tons
The main building will be built of
reinforced concrete, with one basement
floor, and two above-ground floors,
while other buildings will be built of steel.





The new aquarium's main building Building area: approx. 10,800 m

Total floor space: approx. 21,000m

Maximum height: approx. 14 m

Number of floors: Two above-ground

floors, with one basement floor

Structural type: Reinforced concrete,

partly with steel construction

[Energy center building]

Building area: approx. 1,300 m

Total floor space: approx. 2,500m

Number of floors: Two above-ground

floors

**Structural type:** Steel construction

[Denitrification building]

Building area: approx. 110m

Total floor space: approx. 110m

Number of floors: One above-ground

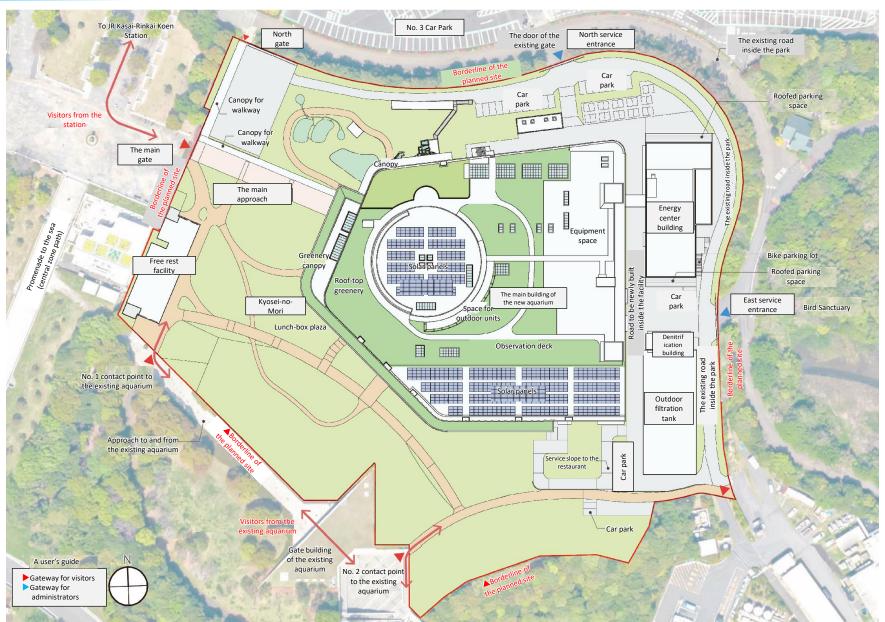
floor

**Structural type:** Reinforced concrete

<sup>\*</sup>The information provided here may be subject to change.



## Overview of the New Facility (Layout Plan)



<sup>\*</sup>The information provided here may be subject to change.

#### A Conceptual Image of the Facility



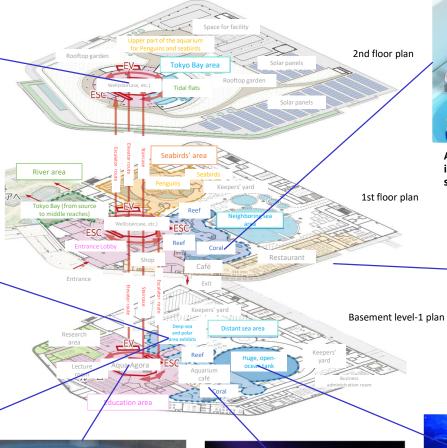
"Aqua-Ring" (a stairwell), which serves as the starting point of the visitors' movement to each area of the exhibits.



Polar exhibit that realistically delivers the unique environment and living creatures of the polar regions with state-of-the-art sensory displays.



The exhibit of the deep-sea life shows the idiosyncratic environment and mysterious ecosystems of the deep sea at the mouth of Tokyo Bay.





"Aqua Agora," which uses ICT (information and communication technology) to connect visitors and lead them to discoveries.



"CORAL LABO," which will help visitors learn about the marine environment today through corals.



A huge coral tank that recreates various corals in diverse environments and the ecosystems surrounding them.



A restaurant and a cafe that meets diverse needs, such as a restaurant integrated with outdoor greenery and a cafe where visitors can enjoy the exhibits.



A huge, open-ocean tank, with which visitors can physically experience the undersea from a diver's perspective.



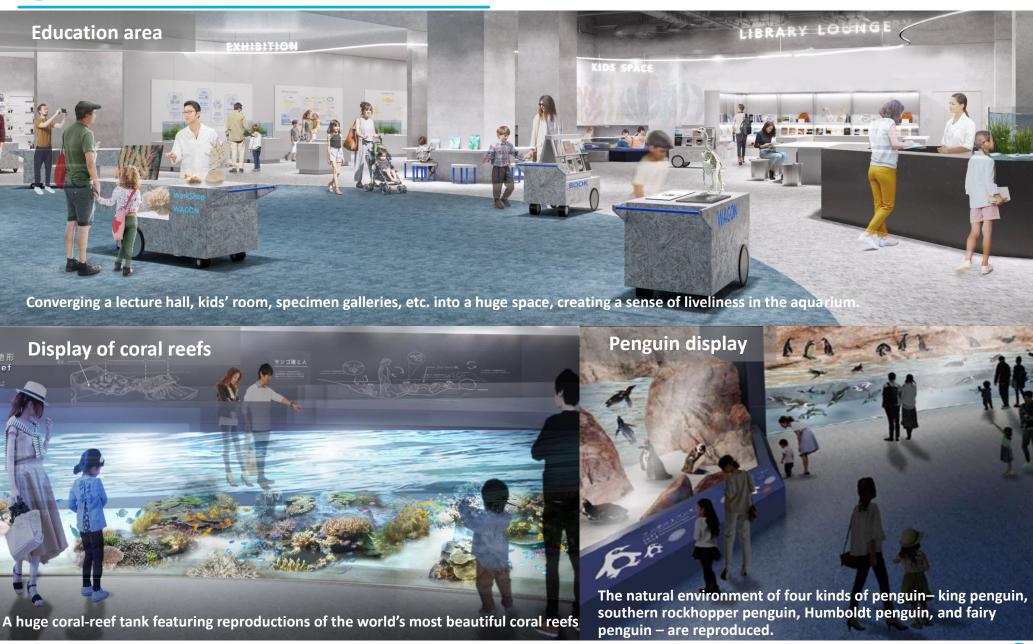
#### A Conceptual Image of the Exhibit







#### A Conceptual Image of the Exhibit





#### **Utilizing the Existing Facility**

As to the main building of the current Tokyo Sea Life Park, the <u>"Basic Concept for the Utilization of Existing Facilities"</u> was made public in September 2021. The current aquarium is known to Tokyo citizens as a landmark of Tokyo for its beautiful spatial composition that harmonizes the building with the surrounding landscape, and the sea. The building is characterized by a 20-meter-high glass dome, designed by internationally famed architect Taniguchi Yoshio.

The Tokyo Metropolitan Government will preserve this building, which can be considered an asset shared by the citizens of Tokyo, even after the new aquarium opens.

After the new aquarium is completed and the fish and other marine organisms are moved into it, we will conduct a fact-finding survey to determine the degree of deterioration and so forth of the existing facility. However, from the perspective of improving the attractiveness of the surrounding area as a whole, by taking advantage of the fact that it is located in Kasai Rinkai Park and is also adjacent to Kasai Marine Park, we will continue to examine, discuss and exchange opinions on how to preserve and use the building in the future with architects and other experts.

The progress of the exchange of opinions will be made public when called for, and we will continue to study how to preserve the beautiful Glass Dome and the whole landscape for the future, and find new value for it while gaining the sympathy of the citizens of Tokyo.

We will also hold events in honor of the Glass Dome.

We will move forward with this series of initiatives under the "Glass Dome Project."

