

## **【Press Preview】 Chiba Prefecture**

### **Makuhari New City, Home of the World's First Fully Automated Plant Factory and an Olympic and Paralympic Event Venue**

**Tuesday, November 27, 2018**

Release Date: Thursday, November 8, 2018

\*This tour is for foreign press only.

\*This tour is planned and operated by Chiba Prefecture, with the FPCJ providing assistance with registration.



Makuhari New City (Photo credit: Chiba Prefecture Public Enterprises Land Management Bureau)

Chiba Prefecture will be holding a tour for the foreign press to introduce new efforts in Makuhari New City.

Makuhari is a district in Chiba Prefecture made by reclaiming land from Tokyo Bay, and seven events will be held there during the 2020 Tokyo Olympic and Paralympic Games. The world's first fully automated plant factory has also begun operation underground in Makuhari.

**This tour will visit Makuhari New City to cover the world's first fully automated plant factory underground, and the preparations for the 2020 Tokyo Olympic and Paralympic Games in Chiba, where the Makuhari Messe will be the venue for seven events including wrestling.**

The Makuhari New City project started in 1989, with the opening of the Makuhari Messe convention center. In a 522.2-hectare area, office buildings, schools, research facilities, hotels, commercial facilities, and residential districts have been built, continuing the development of a multi-purpose city.

## ○ Fully Automated Underground Plant Factory: Makuhari Farm Vechica

Underneath Makuhari New City are 7.6 kilometers of utility tunnels containing vital infrastructure including electricity, communications, and water. The utility tunnels were built over a wide area to allow for future expansion of Makuhari New City, but due to economic stagnation that plan stalled, with some of the space remaining unused.

Chiba Prefecture examined ways to effectively use the space in the utility tunnels that had no plans for use, and considering the prefecture's policy of creating new industries, the decision was made to create a plant factory.

Itoh Denki Co., Ltd. was the company chosen for the project, and in December 2017 the world's first fully automated plant factory, Makuhari Farm Vechica, opened in the utility tunnels underground. The farm was developed by Itoh Denki, and the plants grown here, such as lettuce, are transported by conveyor belts, with all the work except for planting seeds and harvesting being carried out automatically.

The farm is currently in a testing period for verification, producing approximately 200 plants per day, but the goal is to be producing 5,000 per day by 2020.

The tour will enter the utility tunnels and hear from representatives of Chiba Prefecture and Itoh Denki about the project, the facility, and future issues.

※To protect the technology being used, taking pictures of the farming facility itself will not be permitted. It will be possible to see the facility from the outside, through the windows of the tent. (Prepared pictures will be provided.)

※A "cell" box of lettuce will be brought outside the tent for pictures to be taken of it.



Surface facility for Makuhari Farm Vechica



(Photo credit: Itoh Denki)

## [Features]

- An example of unused public facilities being used effectively for a cutting-edge project.
- The weather underground maintains a level temperature, so no air conditioning system is needed and the power costs to maintain growing conditions are approximately one third that of a normal plant factory of the same size.
- Since existing utility tunnels are used, construction costs for the plant were also decreased. Being nearby to major consumers, such as Tokyo, also reduces transportation costs.
- By growing the crops in “cells,” box-shaped enclosed spaces, energy costs for light and ventilation can also be reduced.
- By using IoT technology for the LED lighting and circulation of nutrients, it is possible to set the growing conditions separately for each cell.
- None of the work done by humans is carried out underground, where growing and transportation is fully automated.

## ○ 2020 Tokyo Olympics and Paralympics Event Venue: Makuhari Messe



Photo credit: Makuhari Messe

As one of Asia’s most famous convention centers, many international conferences and global sports events have been held in the Makuhari Messe, and it will be the venue for seven events, including fencing and wrestling, during the 2020 Tokyo Olympics and Paralympics.

Chiba Prefecture has been carrying out preparations to welcome visitors from Japan and overseas, taking advantage of the appeal of the Makuhari New City.

This tour will visit the planned venue for Olympic events, and hear from representatives of the facility management company Makuhari Messe, Inc. and of Chiba Prefecture about the venue and preparations for the Olympic and Paralympic Games.

## <Event Details>

■ Time and Date: 13:30–16:30, Tuesday, November 27, 2018

■ Meeting Place and Time: 13:30, JR East Keiyo Line Kaihimmakuhari (Kaihin-Makuhari) Station, meet at ticket gates

\*It is approximately 35 minutes by train to Kaihimmakuhari Station from Tokyo Station

■ Tour Stops: Makuhari New City—Fully automated plant factory, Makuhari Messe (Chiba City)

<Schedule>

- |             |   |
|-------------|---|
| 13:30       | Meet at JR Keiyo Line Kaihimmakuhari Station ticket gates (participants must pay their own transportation costs to and from the tour) |
| 13:30–13:40 | Travel by bus to fully automated plant factory  |
| 13:40–15:00 | Briefing, Q&A session, tour of facility<br>-Chiba Prefecture (Public Enterprises Land Management Bureau)<br>-Itoh Denki Co., Ltd.     |
| 15:00–15:10 | Travel by bus to Makuhari Messe   |
| 15:10–16:20 | Briefing, Q&A session, tour of facility<br>-Makuhari Messe, Inc.  |
| 16:20–16:30 | Walk to JR Keiyo Line Kaihimmakuhari Station, tour ends   |

- Participation fee: Free of charge
- Maximum number of participants: 10 (If the number of applicants exceeds 10, an upper limit may be set on the number of participants from each country/region)
- Qualification: Bearer of Gaimusho Press Registration Card
- Language: Japanese (with English interpretation)
- Remarks:

\*There may be some restrictions on photographing and filming at the tour sites. Please follow the instructions of the officials on duty.

\*Chiba Prefecture and FPCJ will not be liable for any inconvenience, trouble or accidents that might occur during the tour. The schedule is subject to change without notice.

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<How to apply>

Please send the information below to [sc@fpcjpn.or.jp](mailto:sc@fpcjpn.or.jp)

(Person in charge of the application: Ms. Yoshida, Foreign Press Center Japan)

Your application will need to include the items listed below.

- (1) Applicants name:
- (2) Affiliated media organization:
- (3) The type of organization (newspaper, magazine, TV etc.):
- (4) The nationality of organization:
- (5) Phone number / FAX number / E-mail address:
- (6) Mobile number (for emergency contact during the event):
- (7) Interview Questions:

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[Contact]

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Strategic Communications Division

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