

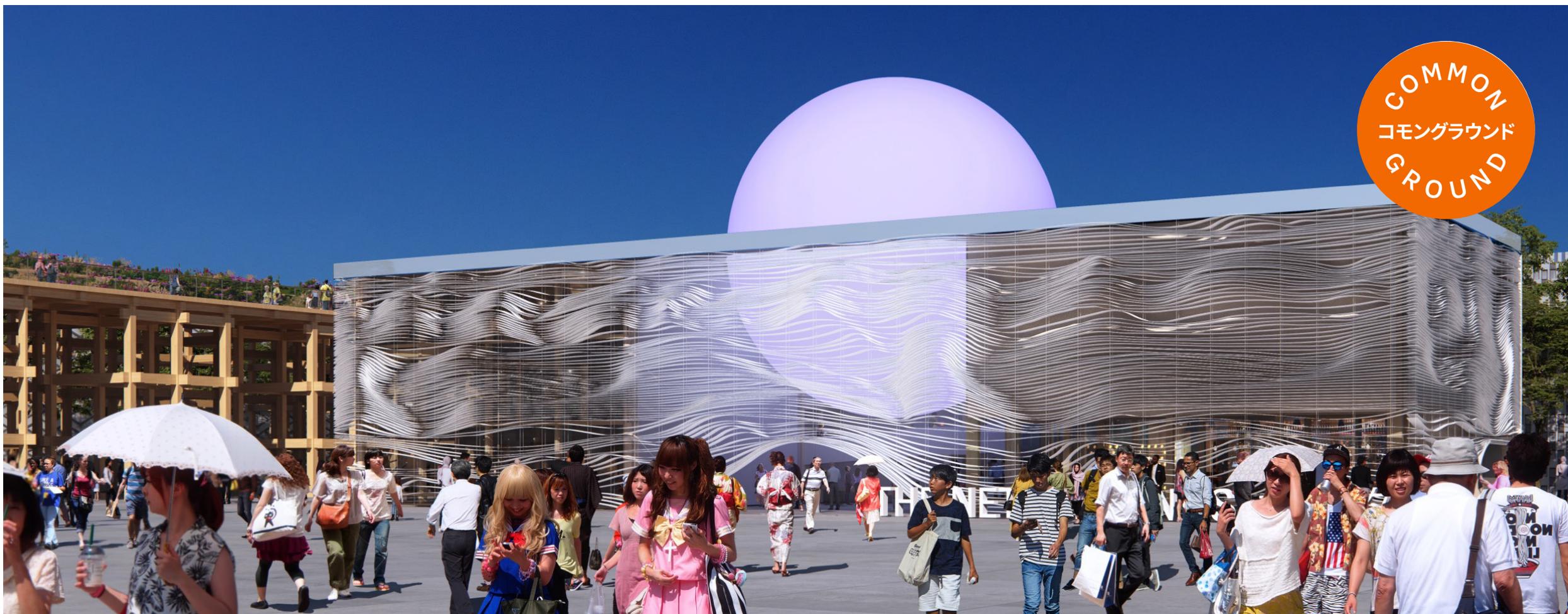
# NL

Netherlands

オランダ

Tuinbouw en duurzame  
voedselproductie en  
consumptie

COMMON  
コモングラウンド  
GROUND





# Belqis Askaryar

Project Manager Trade & Innovate  
International



# Programma

- 15.30 - 15.35 Welkom – Belqis Askaryar  
15.35 - 15.50 Altern. eiwitten & gezonde voeding – Linda van Schijlenborgh  
15.50 - 16.05 Ondernemen in Japan – Rudy Simons  
16.05 - 16.20 Tuinbouw – Mirjam Boekestijn  
16.20 - 16.35 Ondernemen in Japan – Wierd Vonk  
16.35 - 16.45 Vragen en discussie



# Linda van Schuijlenborgh

Project Manager Trade & Innovate  
International

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## Programma alternatieve eiwitten en gezonde voeding



# Kansen voor alternatieve eiwitten en gezonde voeding

- Veel interesse in alternatieve eiwitten en gezonde voeding vanwege een sterk vergrijzende bevolking.
- Sterke afhankelijkheid van import van vlees baart de overheid zorgen.
- Gezondheidsaspecten zijn in Japan erg belangrijk.
- Soja is al eeuwen een belangrijke eiwitbron.
- Er is een lange historie van functional foods.



# 5-16 juni Nederland Paviljoen

'Production and consumption of alternative proteins  
and healthy food.'

- Programma voorbereiding door kernteam onder leiding van trackleader Ontwikkelingsmaatschappij Oost NL.
- Landelijk programma.
- Programma bestaat uit 2 missies;
  - Missie rond alternatieve eiwitten
  - Missie rond gezonde voeding



# Doel van deelname

- Vormen van een cluster van bedrijven.
- Nederland positioneren als koploper en betrouwbare partner op alternatieve eiwitten en gezonde voeding.
- Uitwisseling van kennis op het gebied van innovatie.



# Onderzoek in Japan – sneak preview



- De markt voor plantaardige eiwitten is groeiende (verdubbeld in de afgelopen 10 jaar).
- Plantaardige melk is de grootste markt (85%) met name soja melk.
- Sterk opkomend zijn plantaardige vis, plantaardig ei en desserts/zoetwaren.
- Gezondheid is de belangrijkste drijfveer.
- De meeste producten met algen in Japan zijn voedingssupplementen, interesse in andere producten.
- Fermentatie heeft een lange traditie, er is interesse in precisie fermentatie en biomassa fermentatie.
- Grote corporates op het gebied van precisie fermentatie zijn op zoek naar buitenlandse samenwerkingen.
- De Japanse consument is nieuwsgierig maar behoudend, veiligheid is belangrijk.
- Producten met gezondheidsaspecten hebben de meeste kansen op de markt, vooral als zij hier met slimme marketing op inspelen.

# Alternatieve eiwitten



- Plant-based proteins; bonen, peulvruchten, noten, zaden en zeewier.
- Fermentation based proteins; eiwitten gemaakt door fermentatie van microbiële biomassa of precisie fermentatie.
- Insect-based proteins.
- Cell-cultured proteins (rechtstreeks uit dierlijke cellen).



# Gezonde voeding

- Functional Food; voeding met toegevoegde gezondheidsaspecten.
  - Probiotisch- en prebiotische voeding
  - Voedingsmiddelen verrijkt met Omega-3, antioxidanten, vit. en mineralen.
- Personalized nutrition; identificeren van individuele voedingsbehoeften en gevoeligheden op basis van genetische variaties:
  - Microbiome analyse
  - Bloedonderzoek
  - Voedingsadvies op maat



Datum	Missie alternatieve eiwitten	Missie gezonde voeding
Maandag 2 juni	Welkom diner	
Dinsdag 3 juni	Bedrijfsbezoeken	
Woensdag 4 juni	Reizen, bedrijfsbezoeken	
Donderdag 5 juni	Programma paviljoen (ochtend)	
Vrijdag 6 juni	Programma paviljoen (ochtend)	
Zondag 8 juni		Welkom diner
Maandag 9 juni	Symposium Alternatieve eiwitten en gezonde voeding	
Dinsdag 10 juni		Programma paviljoen
Woensdag 11 juni		Programma paviljoen icm FC / bedrijfsbezoeken
Donderdag 12 juni		Hightech & foodprocessing / bedrijfsbezoeken
Vrijdag 13 juni		n.t.b..

# Programma missie alternatieve eiwitten



Datum	Locatie	Programma
Maandag 2 juni	Tokio	Kick off en welkom
Dinsdag 3 juni	Tokio	Bedrijfsbezoeken
Woensdag 4 juni	Osaka	Reizen, bedrijfsbezoek, afspraken
Donderdag 5 juni	Paviljoen Expo Osaka	Ochtend programma alternatieve eiwitten met symposium, tastings, demo's
Vrijdag 6 juni	Paviljoen Expo Osaka	Ochtend programma met symposium. Middag bezoek expo Osaka 2025
Maandag 9 juni	Osaka	Symposium 'Alternatieve eiwitten en gezonde voeding'

# Programma missie gezonde voeding



Datum	Locatie	Programma
Zondag 8 juni	Osaka	Kick off en welkom
Maandag 9 juni	Osaka	Symposium 'Alternatieve eiwitten en gezonde voeding'
Dinsdag 10 juni	Paviljoen Expo Osaka	Programma gezonde voeding met symposium, tastings, demo's
Woensdag 11 juni	Paviljoen Expo Osaka	Programma rond zuivel, duurzaamheid, alternatieve eiwitten en functional foods ism Friesland Campina / Bedrijfsbezoeken Osaka / Bezoek Expo
Donderdag 12 juni	Paviljoen Expo Osaka	Programma rond High tech en Food processing / Bedrijfsbezoeken / Bezoek Expo
Vrijdag 13 juni	Osaka	Ruimte voor 1-op-1 meetings, bedrijfsbezoek, bezoek expo



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NL

Let's meet in Osaka, Japan  
2025





# Mirjam Boekestijn

CEO Dutch Greenhouse Delta

Netherlands

オランダ

# NL HortiRoad2Osaka

17 Juni 2024  
Expo 2025 Osaka Business  
Event Leiden

NL



# Opportunities

## NL HortiRoad2Osaka

Under its 2021 strategy for a sustainable food system, Japan invests heavily in the **de-carbonization** and **revitalization** of its scattered, lagging agricultural sector.

Both countries are committed to enhancing food security and finding effective solutions to increasing **labour shortages** and the **adverse effects of biodiversity loss and climate change** on agricultural production. In addition, Japan faces significant challenges due to **complex supply chains**, **geographical conditions**, and **high food prices**.

Japanese look to the Netherlands as an important point of reference and is looking to implement innovative technologies and cultivation practices for sustainable **Netherlands** production.



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# NL HortiRoad2Osaka

In order to prepare for an optimal exposure of The Netherlands during the Expo 2025 Osaka, the Ministry of Foreign Affairs together with the relevant Ministries has appointed track leaders per focus track.

Dutch Greenhouse Delta (DGD) is appointed for the track horticulture (NL HortiRoad2Osaka).

Task is to make a programming for the horticulture sector at Expo Osaka 2025.



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# Plan of approach NL HortiRoad2Osaka

- DGD has compiled a core team representing the so-called triple helix;
- DGD has compiled a work group with actively involved sector parties to collect input and feedback on program content;

**CALL TO ACTION:** Please let DGD know if you want to join the workgroup

- DGD organized (and will organize) general meeting(s) for interested parties;
- DGD aligns the activities of the track horticulture with the other tracks, especially on the track alternative proteins and food products with health benefits.



# Goals NL HortiRoad2Osaka

The activity(s) within the programming for the track horticulture at Expo 2025 Osaka aim to:

1. Position the Netherlands as a leading country and reliable partner in the field of horticulture, with a focus on controlled environment agriculture (CEA) and its innovative solutions such as robotization, and strengthen its reputation in Japan (and in the region);
2. Create stronger bilateral relations as illustrated by potential MoUs, launches of new business partnerships or other collaboration agreements made public during Expo 2025 Osaka;
3. Promote and inspire cooperation on innovations between Japanese partners in business, academia and (local) government with the Dutch horticulture sector.
4. Facilitate and support the Dutch horticulture sector in pre-business development in Japan (and in the region) through exploring business opportunities, establishing new contacts and good positioning of the sector;
5. Inform Japanese society (and in the region) on how CEA realizes food security and safety, boosts public health, and achieves a green and colourful society while contributing to climate action, biodiversity restoration and environmental conservation;

# Target Groups

## NL HortiRoad2Osaka

The primary target groups for the programming for the track horticulture at Expo 2025 Osaka:

- Government
- Investors
- Growers / Cooperatives
- AgriTech companies
- Industry organizations
- Retailers
- Knowledge institutes/Universities
- Media



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# Target Groups

NL

## HortiRoad2Osaka

The secondary target groups for the programming for the track horticulture at Expo 2025 Osaka:

- Daily visitors from Japan and the region (e.g. consumers, students (schools));
- Influencers (e.g. food bloggers)



# Programming NL HortiRoad2Osaka

Timing week of  
15 September  
2025 (tbc)

Date	Location	Program details/topics
Day 1	Hotel (TBD)	Late afternoon: <ul style="list-style-type: none"> <li>• Collecting name tag and registration</li> <li>• Kick-off and briefing session</li> </ul>
	TBD	Evening: <ul style="list-style-type: none"> <li>• Dinner</li> </ul>
Day 2	NL Pavilion Expo Osaka or venue in Osaka	Morning <ul style="list-style-type: none"> <li>• Plenary session in forum style (focus on the main theme)</li> </ul>
	NL Pavilion Expo Osaka or venue in Osaka	Morning/afternoon <ul style="list-style-type: none"> <li>• Networking lunch</li> </ul>
	NL Pavilion Expo Osaka or venue in Osaka	Afternoon <ul style="list-style-type: none"> <li>• Break-out sessions/workshops on the different sub-themes</li> </ul>
	Venue in Osaka	Evening <ul style="list-style-type: none"> <li>• Networking dinner (preferably a dinner with a story like we did at Dubai Expo)</li> </ul>
Day 3	NL Pavilion Expo Osaka	CEO Roundtable Japan and the Netherlands: joint success stories
	NL Pavilion Expo Osaka or venue in Osaka	Morning/afternoon <ul style="list-style-type: none"> <li>• CEO lunch Japan and the Netherlands</li> </ul>
	Indoor Farm Osaka (TBD)	Afternoon <ul style="list-style-type: none"> <li>• Field visit</li> </ul>
	Travelling	Late afternoon/evening <ul style="list-style-type: none"> <li>• Travel to Aichi/Mie prefecture (or other prefecture) (TBD)</li> </ul>
Day 4		Program at Aichi/Mie Prefecture (or other prefecture) (TBD) <ul style="list-style-type: none"> <li>• Mix between seminars, break-out sessions, networking and field visit</li> </ul>
Day 5		Travel to other prefecture (e.g. Kochi,) (planning TBD)  Program at to be determined Prefecture (TBD) <ul style="list-style-type: none"> <li>• Mix between seminars, break-out sessions, networking and field visit</li> </ul>
Day 6		Program at to be determined Prefecture (e.g. Kochi (TBD)) <ul style="list-style-type: none"> <li>• Mix between seminars, break-out sessions, networking and field visit</li> </ul>

# Display & promotion

NL

## HortiRoad2Osaka

### Storytelling

- The story of controlled environment agriculture – a driving force behind sustainability
- Supported by case stories: projects, existing collaborations, innovations
- MoUs, launches of new business partnerships/ collaboration agreements

**CALL TO ACTION:** please provide DGD with **input** Tools, such as:

- Programming
- Social Media and Press
- Movie (inc. after movie), VR-Movie
- ...



World Expo Dubai

# Road2ExpoOsa ka

# Activities NL HortiRoad2Osaka



- Sector study Horticulture Japan with focus on the development of large-scale greenhouses in Japan
- Horti-seminar at the occasion of GPEC (25 July 2024)
- Workshop modern farm management (TBC)
  - \* Note: focus on knowledge exchange in the horticulture sector
- Incoming delegation from Kochi (companies, growers, students, researchers & government (September 2024)
- Dutch Trade mission to Japan (week of 17 February 2025, tbc)  
**CALL TO ACTION:** Please inform DGD when you have interest

# Call to action

# Call to action

- DGD has compiled a work group with actively involved sector parties to collect input and feedback on program content;  
**CALL TO ACTION: Please let DGD know if you want to join the workgroup**
- Dutch trade mission to Japan (week of 17 February 2025, tbc)  
**CALL TO ACTION: Please inform DGD when you have interest**
- Dutch trade mission to Japan for program Expo Osaka (week of 15 September, tbc)  
**CALL TO ACTION: Please inform DGD when you have interest**
- Storytelling: case stories, MoU's, projects, collaborations etc.  
**CALL TO ACTION: Please provide DGD with input**

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I would love to continue  
the conversation.



Please e-mail DGD at  
[mirjam.boekestijn@dutchgreenhousedelta.com](mailto:mirjam.boekestijn@dutchgreenhousedelta.com)

NL

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Road 2 osaka

A photograph of a young woman wearing a grey bucket hat, a dark blue polo shirt with Japanese text on the chest, and a colorful patterned scarf. She is wearing blue gloves and holding a bunch of ripe red cherry tomatoes. She is standing in a greenhouse aisle, with tomato plants on both sides. The background is slightly blurred.

Here's to the  
future growers





Secured cloud environment

## Online



Data collection &  
up to unlimited  
storage



Online updates



IIVO remote access  
via all devices



Online back-ups

## All-in-one process computer:



Growth coach & growth strategies



Automated growing



Data Driven Growing



Crop specific



## Themes



Climate management



Water management



Energy management



Data management



Sensor generated data



Controlling the water, energy  
and assimilates balance  
according to the principles  
of Plant Empowerment







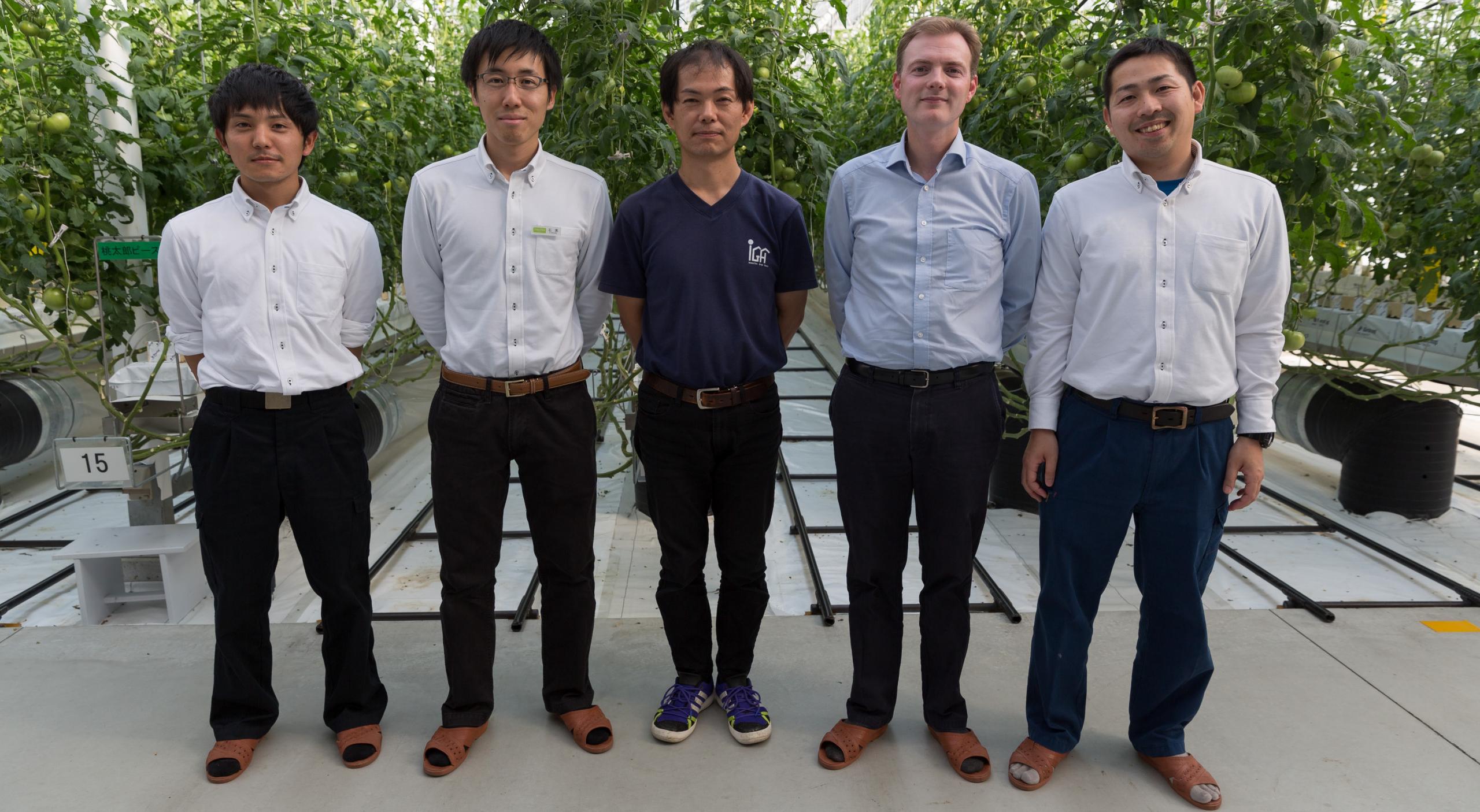
ア

天道六合  
泰樂

泰樂













# プロダクト Products



MIGAKI-ICHI  
Made in YAMAMOTO



MIGAKI-ICHIGO  
Made in YAMAMOTO

## ミガキイチゴ MIGAKI-ICHIGO

宮城県山元町で栽培された上質な複数品種のイチゴの統一ブランドです。  
MIGAKI-ICHIGO is a united brand for various high quality strawberry breeds that were cultivated in Yamamoto-cho, Miyagi.

プラチナ6個入り  
Platinum 6 pieces



プラチナ1個入り  
Platinum 1 piece



プラチナ12個入り  
Platinum 12 pieces

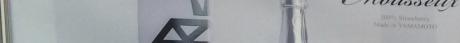


ゴールド1箱  
Gold 1 box



シルバー2パック  
Silver 2 packs

## ミガキイチゴ・ムスー MIGAKI-ICHIGO Mousseux



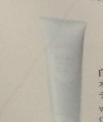
ミガキイチゴを100%使用。  
特別な日を演出する純国産のスパークリングワインです。  
MIGAKI-ICHIGO Mousseux are the purely domestic sparkling wines  
with 100% MIGAKI-ICHIGO that add drama to your special day.

## コスメ Cosmetics

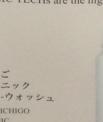
日本発「白いちごエキス」を配合したハイテクオーガニックスキンケア（化粧品）です。  
WHITE ICHIGO ORGANIC TECHs are the high-tech organic skincare (cosmetics) lines with "white strawberry extract" from Japan.



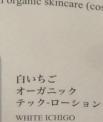
白いちご  
オーガニック  
ティッククレンジング  
WHITE ICHIGO  
ORGANIC  
TECH-CLEANSING



白いちご  
オーガニック  
ティックウォッシュ  
WHITE ICHIGO  
ORGANIC  
TECH-WASH



白いちご  
オーガニック  
ティックローション  
WHITE ICHIGO  
ORGANIC  
TECH-LOTION

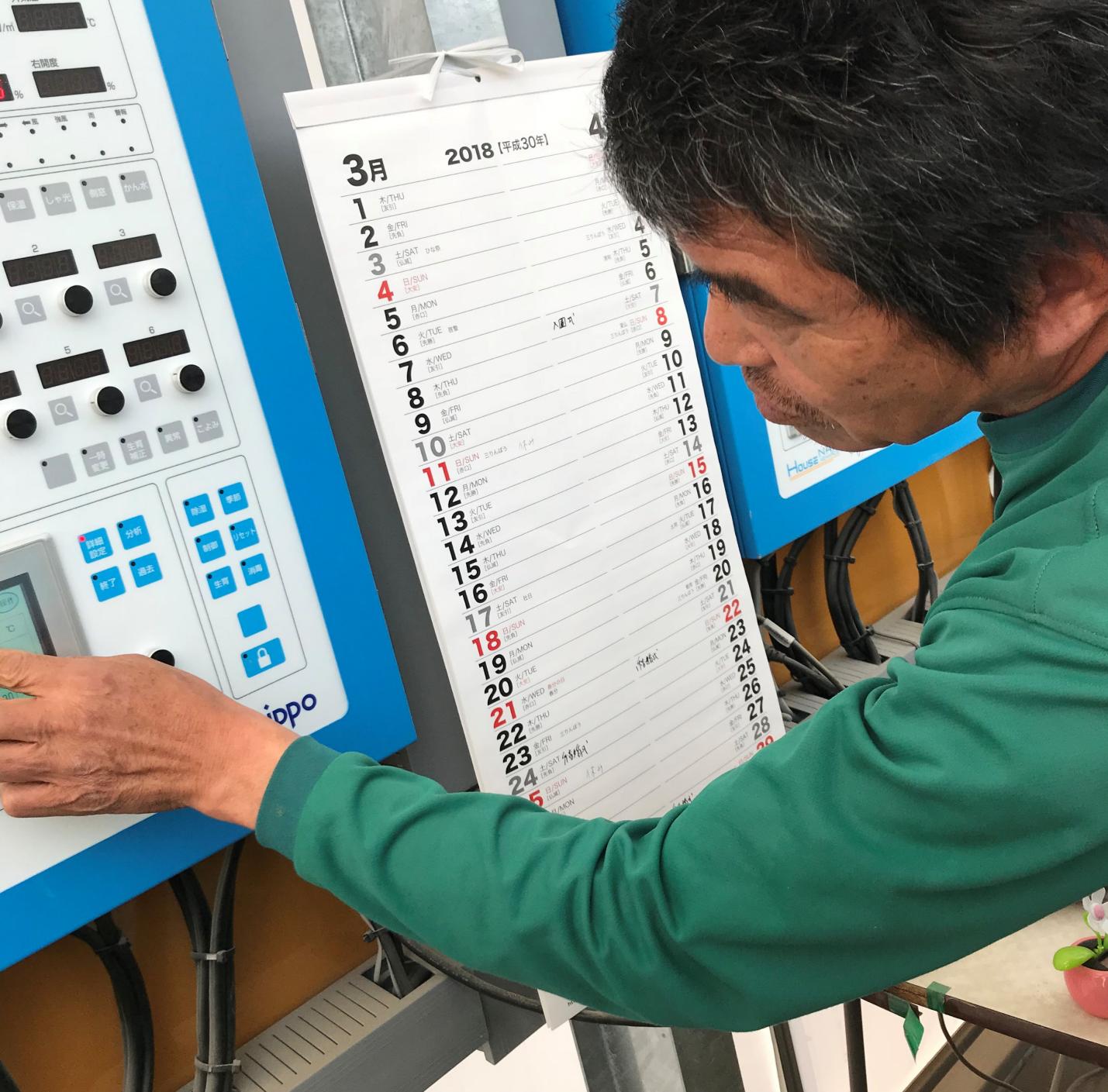


白いちご  
オーガニック  
ティックミルク  
WHITE ICHIGO  
ORGANIC  
TECH-MILK



白いちご  
オーガニック  
スリーピング マスク  
WHITE ICHIGO  
ORGANIC  
SLEEPING MASK

白いちご  
WHITE ICHIGO





ホーム

# エネルギー

DEMO SYSTEM

0 15.8 °C  
73 %2.6 m/秒  
西南西 ↕374 W/m²  
333 J/cm²

2024



気候



給水



エネルギー



植物



作物レシピ

155



Demo1



設定


**ENERGY : BOILER+ BOILER+ TANK TANK TRANSPORT CO2 FREQUENCY PUMPS BOILER PROTECTION ALARM BOILER GR...**
**エネルギー連結管**

Energy Manifold

エネルギー連結管: 給仕温度 °C

0.0

エネルギー連結管: 期間温度 °C

0.0

エネルギー需要 kW

1627.7

熱需要 °C

85

**エネルギー需要蓄電池**

Energy demand ...

エネルギー需要: 計算済み kW

1628

熱需要: 計算済み °C

85

**輸送**

Transport 1

パイプ温度: 計測 °C

83.4

パイプ温度: 計算済み °C

84.0

ポンプ加熱

输送パイプ: 最大 °C

84

输送パイプ: 最低限 °C

20

**エネルギー連結管**

Energy Manifold

熱貯蔵タンク

Buffer Tank

タンク温度

タンク温度: 平均

0.0

タンク給仕温度: センサー °C

0.0

タンク温度: 充填済み層の数

0

タンク温度: センサーの数

0

タンク温度: センサー-01 °C

0.0

タンク温度: センサー-02 °C

0.0

タンク温度: センサー-03 °C

0.0

タンク温度: センサー-04 °C

0.0

タンク温度: センサー-05 °C

0.0

タンク温度: センサー-06 °C

0.0

タンク温度: センサー-07 °C

0.0

タンク温度: センサー-08 °C

0.0

タンク温度: センサー-09 °C

0.0

タンク貯蔵

性能: 最大

m³/時

290 V

**ボイラー+**

Boil...

バーナー位置実施器: 計測...

バーナー: 計測済み位置 % 0

バーナー: 計算済み位置 % 74

ボイラー

ボイラーオン

ボイラーオン: 検出

ボイラー温度: 計測 °C 85

ボイラー帰還温度: 計測 °C 86

エネルギー需要 kW 814

バーナー: CO2管理向けガス... m³/時 60

ボイラー: 生産されたエネル... kW 0

ボイラー熱

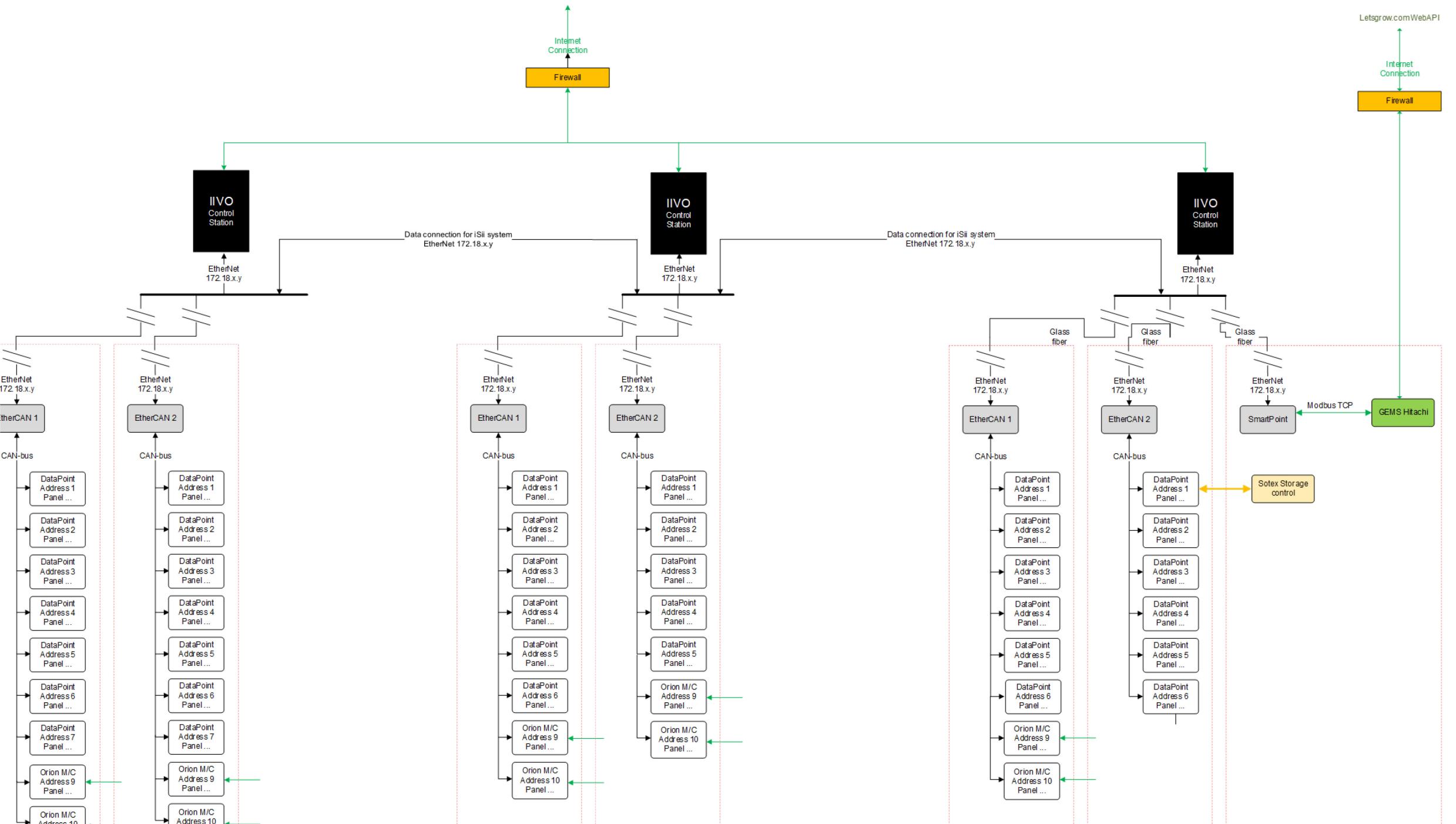
ボイラー温度: 計算済み °C 86

熱需要: 計算済みバーナ... m³/時 215

ボイラータンク充填 Boil...

ボイラータンク貯蔵

タンクフルタック: 計算済みバ... m³/時 0







Project: Katsuta smart greenhouse  
Drawing: Layout Plan B-3

Date: Date:  
1/2009/10 2014.01.10

DODON 株式会社 大同