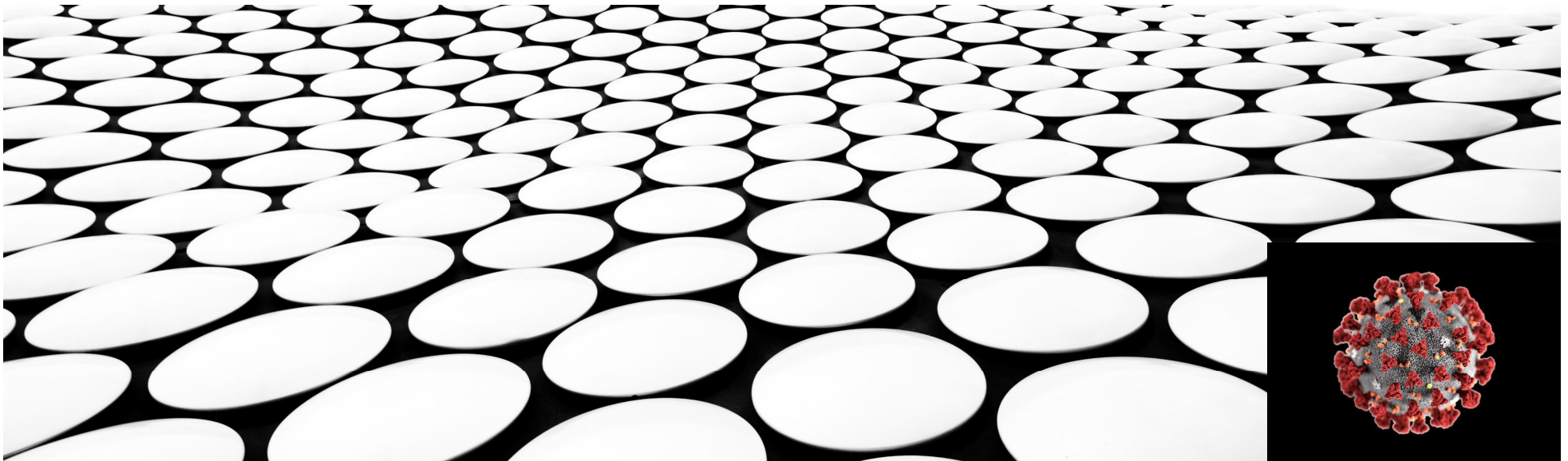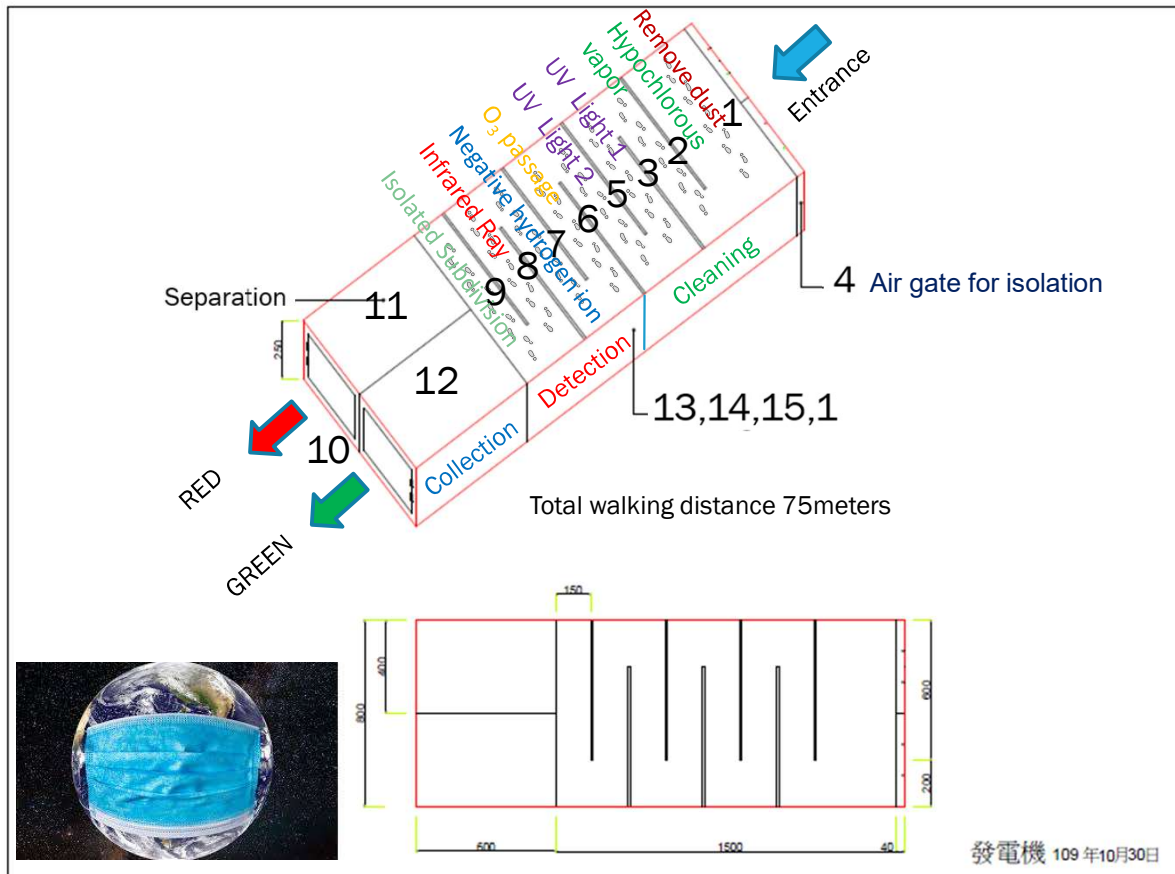# INTRODUCTION OF MULTIFUNCTIONAL VIRUS CLEANING CHANNEL

VICTORY POINT TECH. CO., LTD.   DEC 2020

Multifunctional Virus Cleaning Channel Components & Functions

Remove dust
Hypochlorous vapor
UV Light 1
UV Light 2
O₃ passage
Negative hydrogen ion
Infrared Ray
Isolated Subdivision

Entrance

1
2
3
5
6
7
8
9
11
12
10

4 Air gate for isolation

Separation

RED
GREEN

Cleaning
Detection
Collection

13,14,15,1

Total walking distance 75meters

發電機 109 年10月30日

1. 除塵 Remove dust
2. 空氣清淨Air clearing-------App 網路調控 App Network regulation
3. 空氣清淨器濾網殺菌(紫外線) Air cleaning filter for removing bacteria (UV light)
4. 空氣門隔離Air gate for isolation
5. 通道紫外線檢疫殺菌 UV light passage
6. 通道溴氧檢疫殺菌 O₃ passage
7. 通道負氫離子檢疫殺菌 Negative hydrogen ion passage
8. 通道多負氫氣補充檢疫 Supplement negative hydrogen ion passage
9. 通道遠紅外線檢疫分流 Infrared passage
10. 隔離分區與安全疏導 Isolated subdivision and safety direction
11. 數據收集 Data collection
12. 辨識數據收集 Data identify
13. IP CAM 遠端監控IP CAM remote surveillance
14. IP CAM 遠端監視IP CAM remote monitoring
15. 互聯網數據收集Data collection of internet
16. 模組化 Modulation

Initial and Concept of Multifunctional Virus Cleaning Channel

The mask prevention to Covid-19 experience of Taiwan is amplified and reinforced to place fixed facilities (virus cleaning channel like a big mask) that can be screened at key transport facilities like airport, railway station and MRT transit station, and also population intensive circulating places like government buildings, department stores, theatres, enterprises, factories and communities, etc. The sterilization and identification of human and logistics will effectively reduce the transmission of the virus and the transmission of flying, and allow transportation and logistics to gradually restore pre-epidemic levels, the isolation observation period can be reduced from 14 to 3 to 5 days.

This virus cleaning channel can be designed to single or tunnel type, it can remove virus and bacteria by UV/infrared light, ozone or other functions when people or objects pass through. Different combinations can be designed according to demands and locations. At least 13 types of cleaning channels is developed and ready for prototype testing.

Besides, large amount of data will be collected by biochips in testing period for further improvement of virus cleaning channel, these data will help designer and authorities to understand behavior of virus ahead in stead of chasing it.

2020/12/15

Three basic phases are integrated within Multifunctional Virus Cleaning Channel

Phase 1 - **Cleaning virus**: When people and logistics enter the channel, virus and bacteria are killed and removed from surface by UV/Infrared light and disinfection vapor.

Phase 2 - **Detection & Separation**: Biochips will detect those may be infected by virus that can not clean at phase1, then separate into RED ZONE for further treatment, others go to GREEN ZONE and get a tag.

Phase 3 - **Data collection**: All the virus data of people and logistics are collected into a processing system, which can be analyzed and provide useful information about the pandemic situation.

Professional teams get involved within this project including **Switzerland, Germany, Israel and Japan**.

2020/12/15

Schematic Diagrams of Multifunctional Virus Cleaning Channel

Single Type

Electron Probe

Face Recognition
(optional face recognation system)

Hand Sanitizer

Electrical control box
disinfection box

Pedal

universal wheel

Tunnel Type

Three basic phases are integrated: Cleaning virus, detection & separation and data collection.

2020/12/15

Schematic Diagrams of Virus Cleaning Process

Cleaning Virus

Detection and Separation

AUTOMATIC TEMPERATURE MEASUREMENT

AUTOMATIC DISINFECTION

HIGH TEMPERATURE ALARM

SMART SENSOR

STOP WHEN PEOPLE LEAVE

Single Type

Tunnel Type

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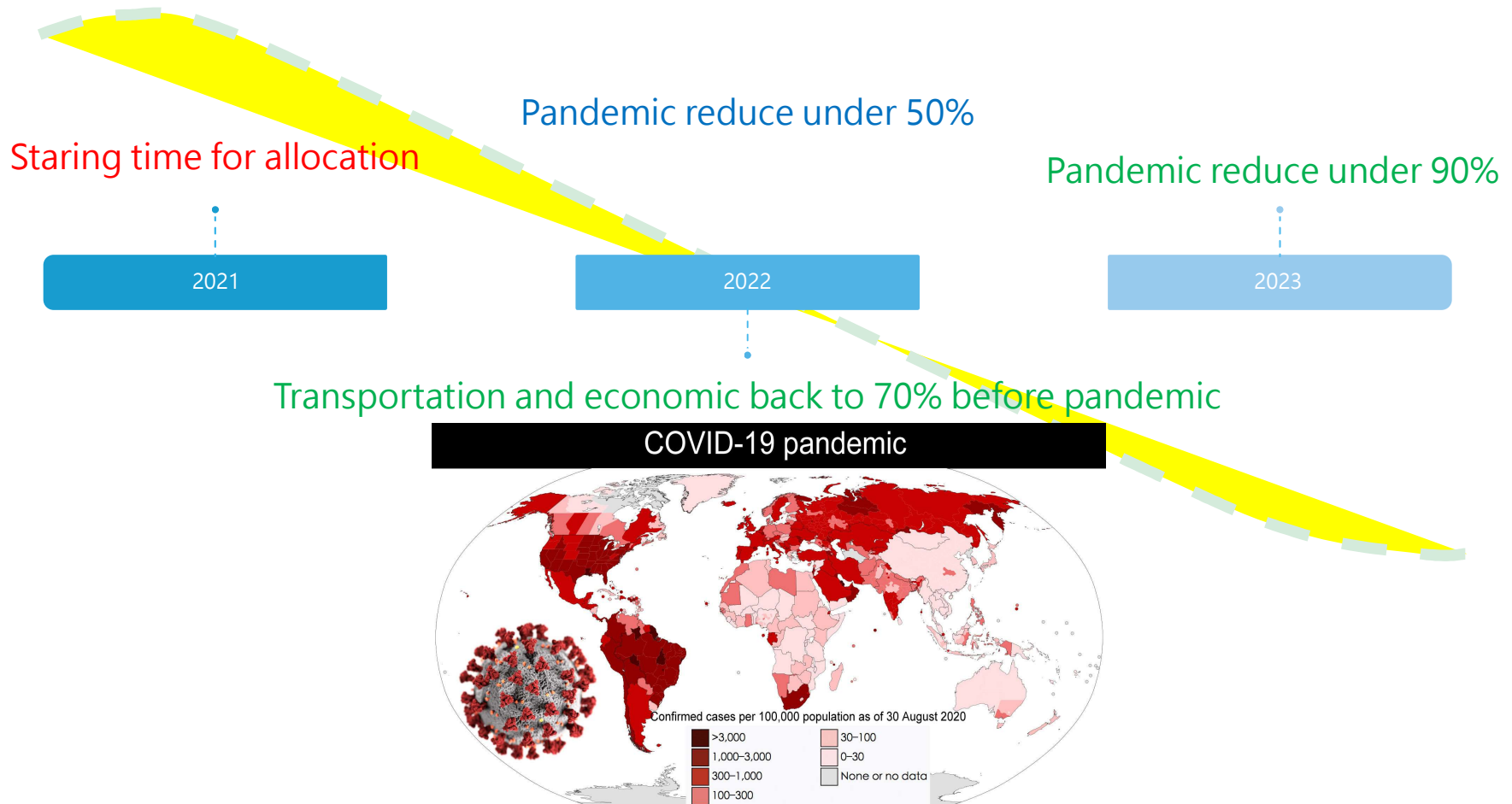# Schematic Diagrams of Different functions

Cleaning Virus

Vapor Disinfection

Data Collection

Big Data Analysis

2020/12/15

Expected Decline Trend of Covid-19 by Multifunctional Virus Cleaning Channel

Staring time for allocation

Pandemic reduce under 50%

Pandemic reduce under 90%

| 2021 | 2022 | 2023 |

Transportation and economic back to 70% before pandemic

COVID-19 pandemic

Confirmed cases per 100,000 population as of 30 August 2020

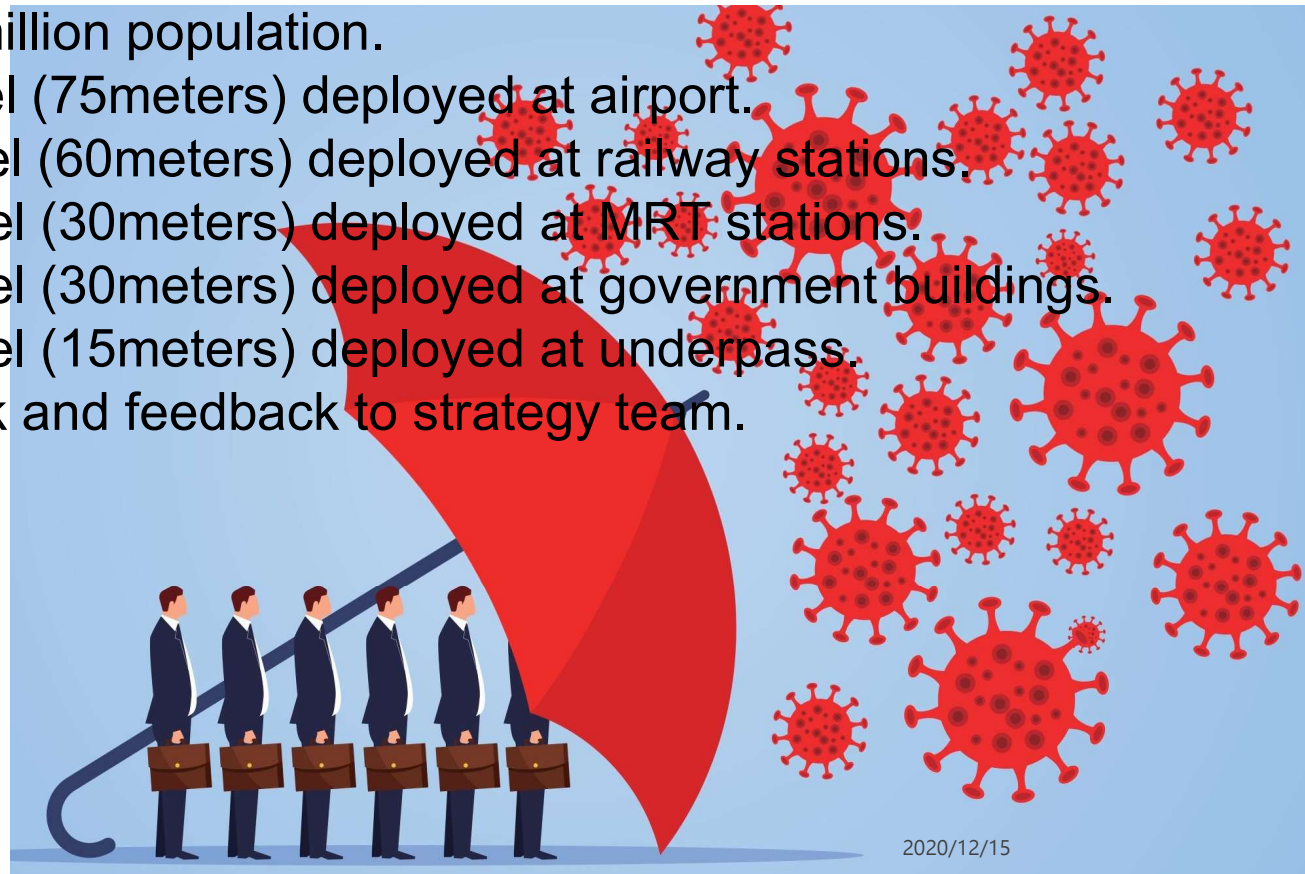|	
>3,000	30–100
1,000–3,000	0–30
300–1,000	None or no data
100–300	

R&D process

1. Define virus cleaning effect and channel types, discuss with medical experts.
2. Search certified equipment and system suitable installed within the channel framework.
3. Initial testing of virus cleaning.
4. Biochips testing for detection of infection.
5 .Program development and testing of big data collection & analysis.
6. Whole system testing at factory.
7. Professional teams including medical science, mechanic module, programing, biotechnical and system coordinate team from Switzerland, Germany, Israel and Japan.
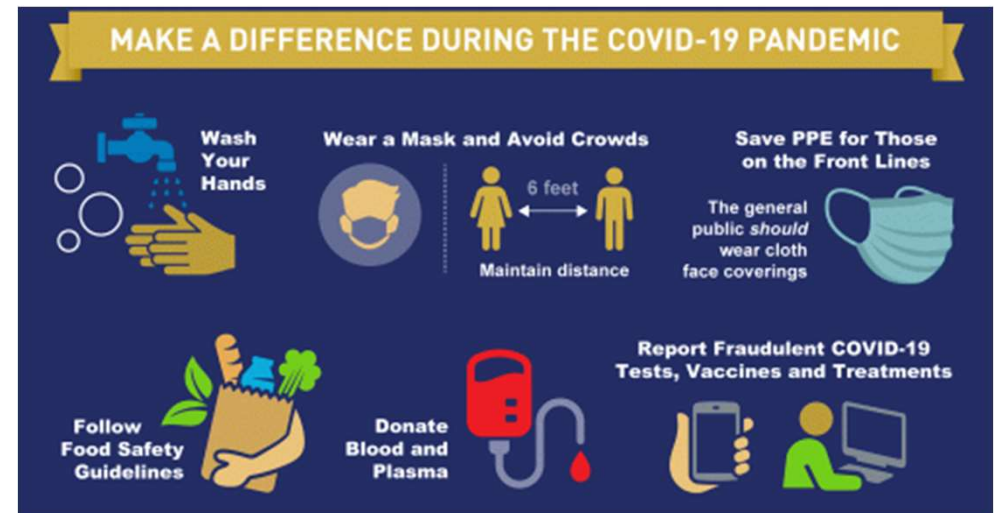
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On Site Deployment Strategy and Testing

1. Assuming a city with 10 million population.
2. 10 sets of A Class channel (75meters) deployed at airport.
3. 20 sets of B Class channel (60meters) deployed at railway stations.
4. 60sets of C Class channel (30meters) deployed at MRT stations.
5. 60 sets of C Class channel (30meters) deployed at government buildings.
6. 60 sets of D Class channel (15meters) deployed at underpass.
7. Testing period: every week and feedback to strategy team.

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Budget and time line

1. Assuming a city with 10 million population needs 210 sets, budget is about USD 200 Million at this initial stage.
2. R&D process: 3 months
3. Manufacture and shipping : 3 months for first 60 sets.
4. Manufacture and shipping : 3 months for another 150 sets.
5. Deploy of 210 sets: 3 months.
6. Testing and adjustment : 3 months.

MAKE A DIFFERENCE DURING THE COVID-19 PANDEMIC

Wash Your Hands

Wear a Mask and Avoid Crowds
6 feet
Maintain distance

Save PPE for Those on the Front Lines
The general public *should* wear cloth face coverings

Follow Food Safety Guidelines

Donate Blood and Plasma

Report Fraudulent COVID-19 Tests, Vaccines and Treatments

2020/12/15

Prev Page