



Introduction of Our Activities in Environmental Engineering Field

KOBELCO ECO-SOLUTIONS CO.,LTD.

Masato HOSOYA
23rd August 2023

1. Corporate Profile



KOBELCO's Business Segment



Profile of Kobe Steel Group

Founded: September 1, 1905
Net Sales: USD14,875 mil*1 (FY2021)
Capital: USD 1,792 mil*1 (FY2021)
Affiliate: 212 subsidiaries
50 equity-valued affiliates
Employees: 40,517*2 (As of 31st March 2021)

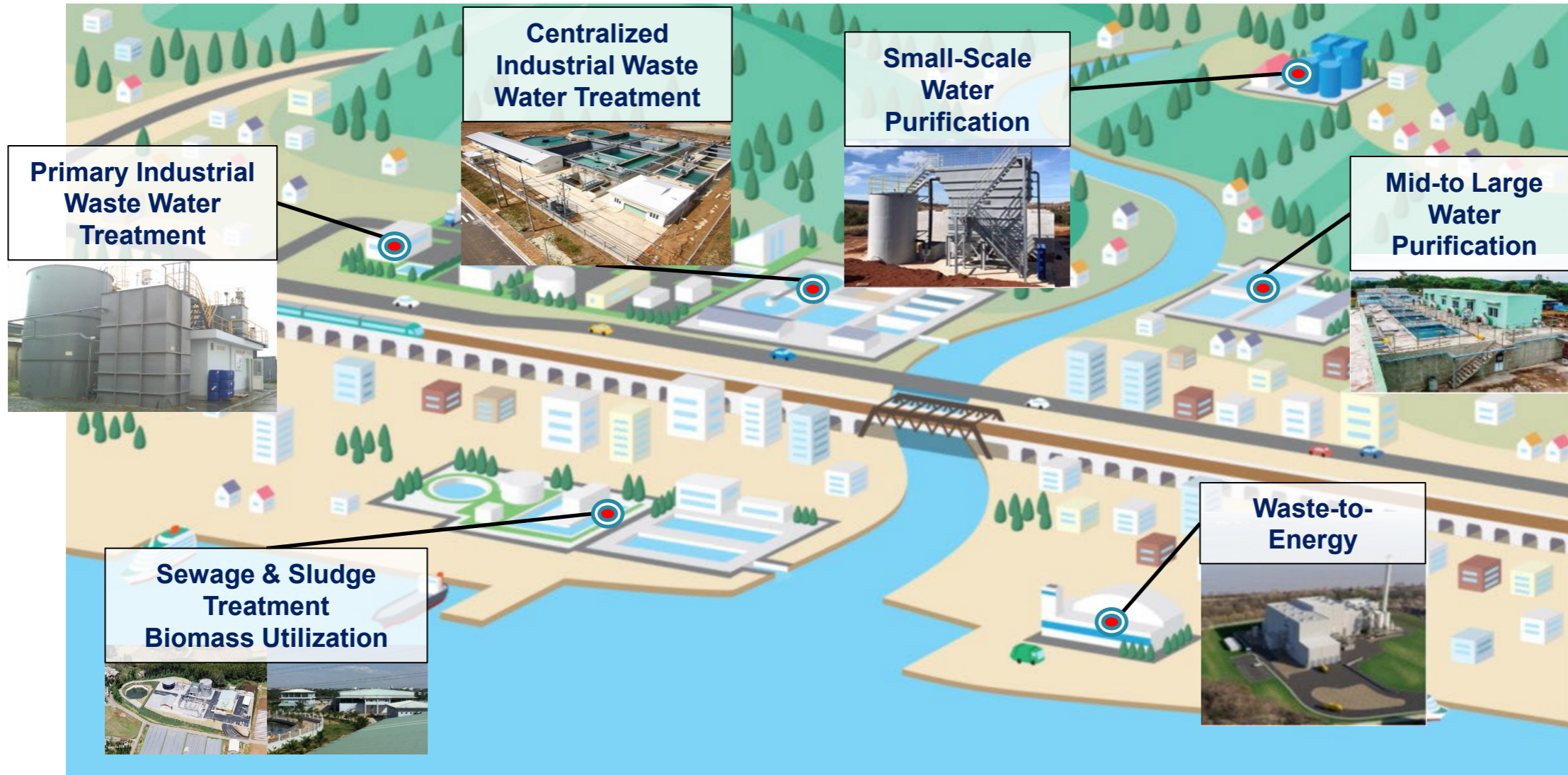
Profile of Kobelco Eco-Solutions

Founded: June 1, 1954
Net Sales: USD732 mil*1 (FY2021)
Capital: USD 43 mil*1 (FY2021)
Employees: 2,912*2 (As of 31st March 2021)

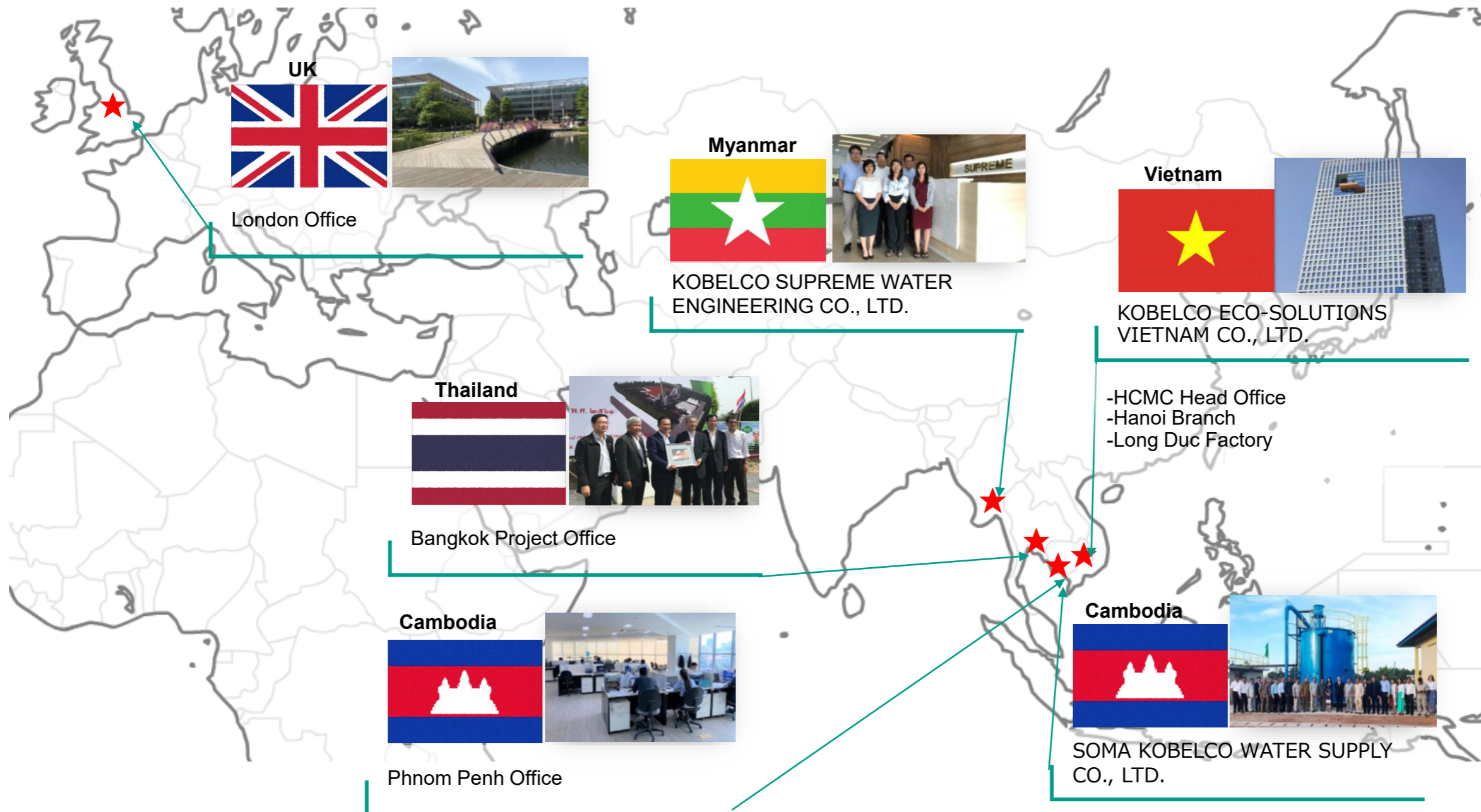
*1 Ex-rate: JP¥ 140 / USD

*2 Consolidated (stand-alone + subsidiaries, excluding affiliates)

- Providing EPC service in “water/wastewater treatment” and “waste to energy” field



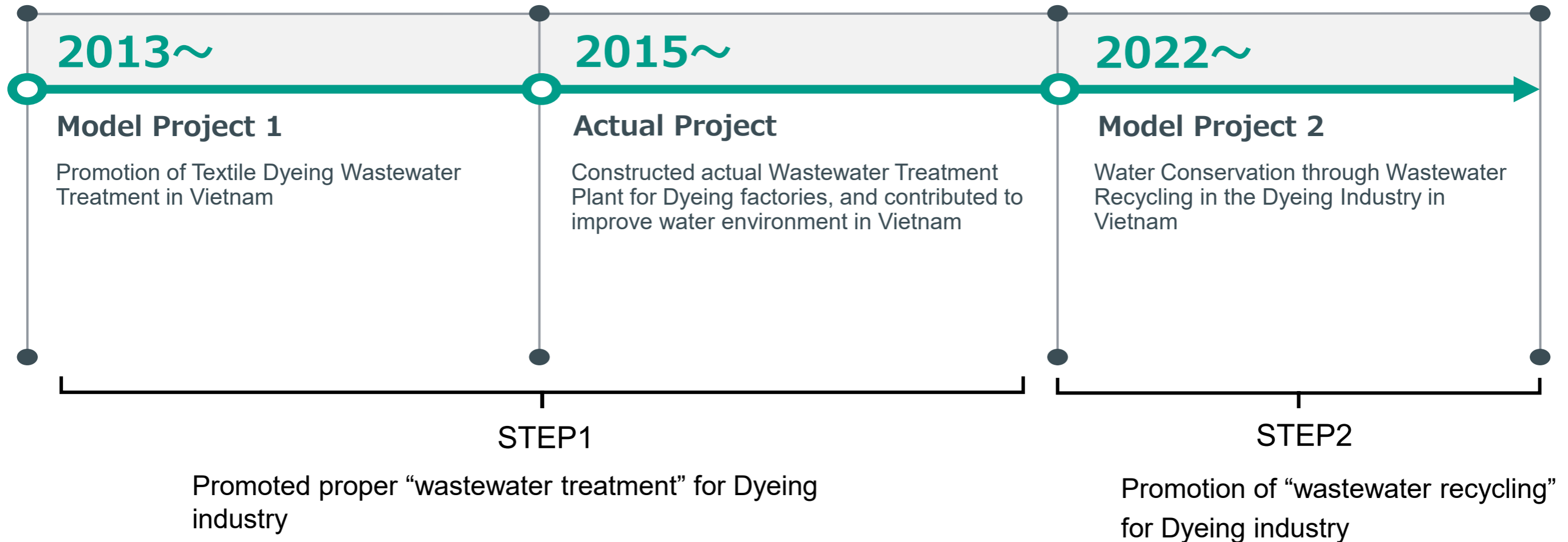
3. Oversea Business of Kobelco Eco-Solutions



4. Model Project of MoE Japan (1)



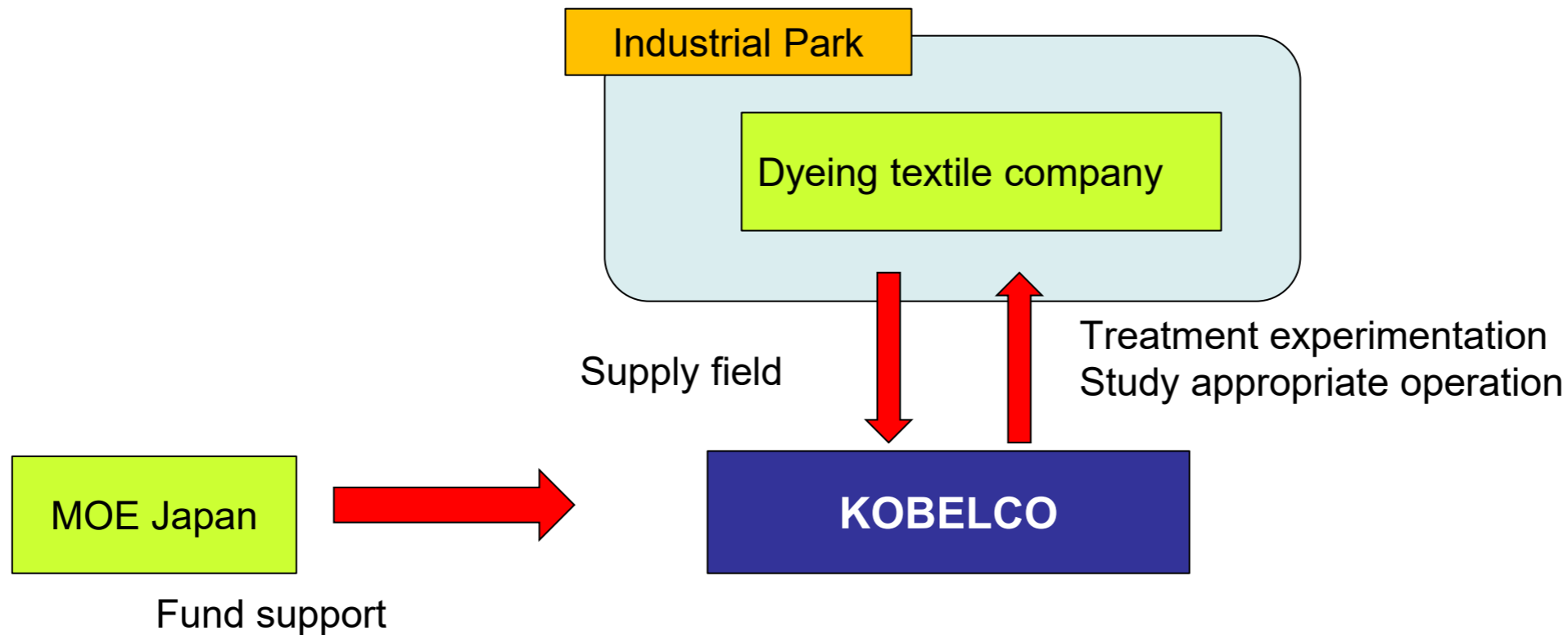
■ KOBELCO is utilizing MoE Japan's program "Model Project for Improvement of Water Environment in Asia" for 2 times.



4. Model Project of MoE Japan (2)



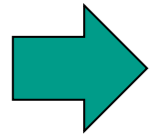
- Basic scheme of our model project is as follows.
- With support of MoE Japan, KOBELCO conducted treatment experimentation and investigation.
- The purpose is promotion of appropriate technology and development of dyeing textile industry.



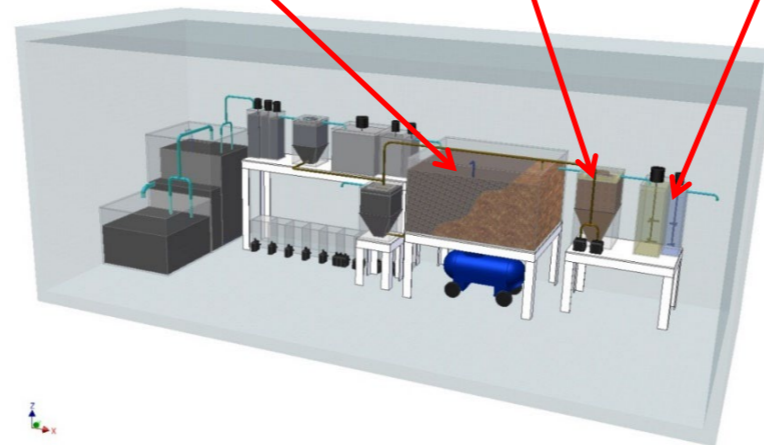
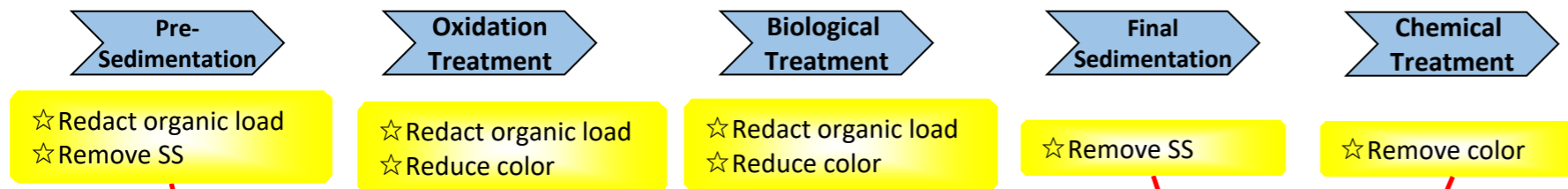
5. STEP1 Promotion of wastewater treatment(1)



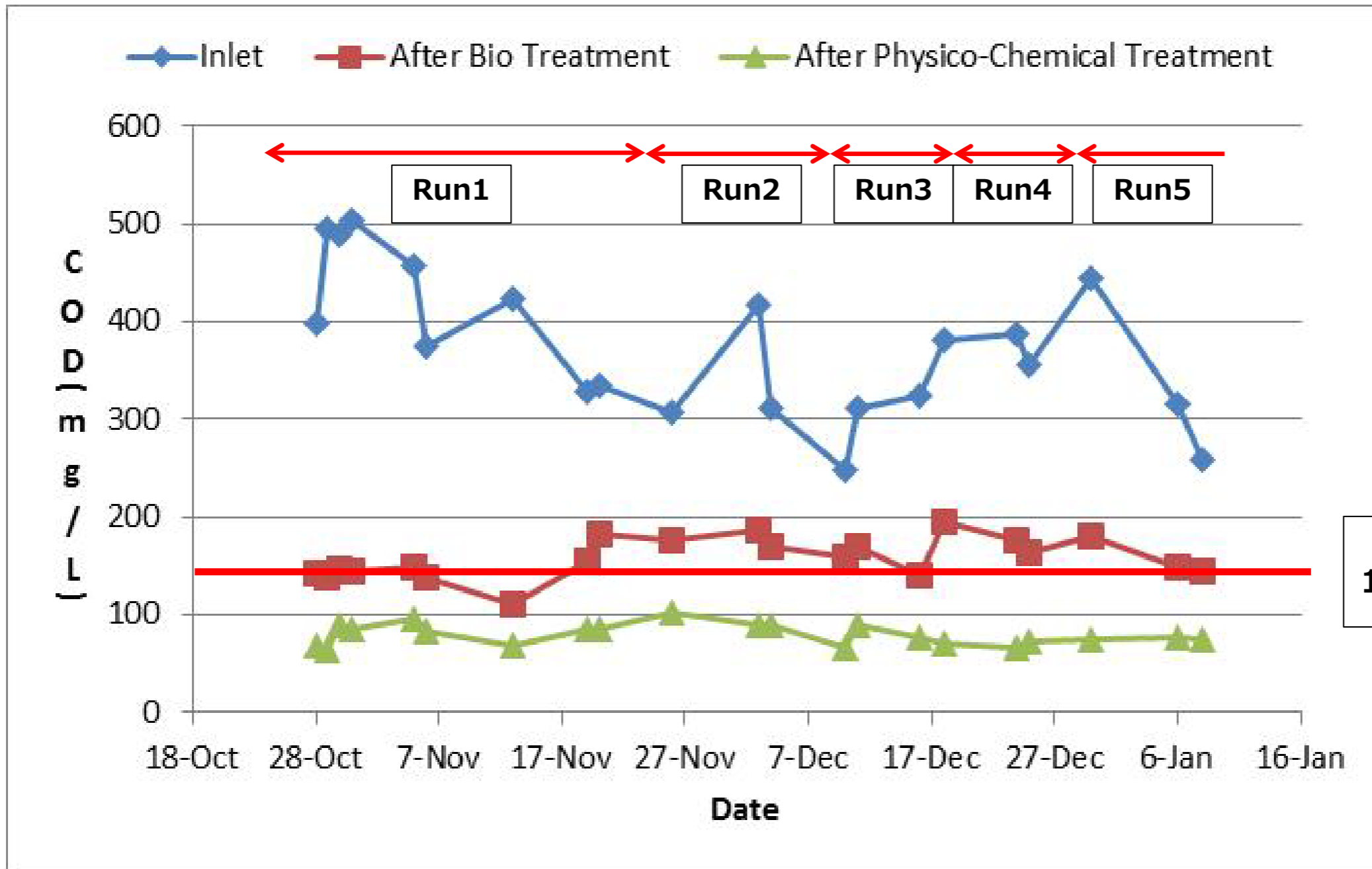
■ In the Model Project 1, KOBELCO fabricated pilot plant for wastewater treatment, then, installed the pilot plant in actual dyeing factory and conducted treatment study.



- Optimized treatment process for Dyeing wastewater
- Minimized operation cost

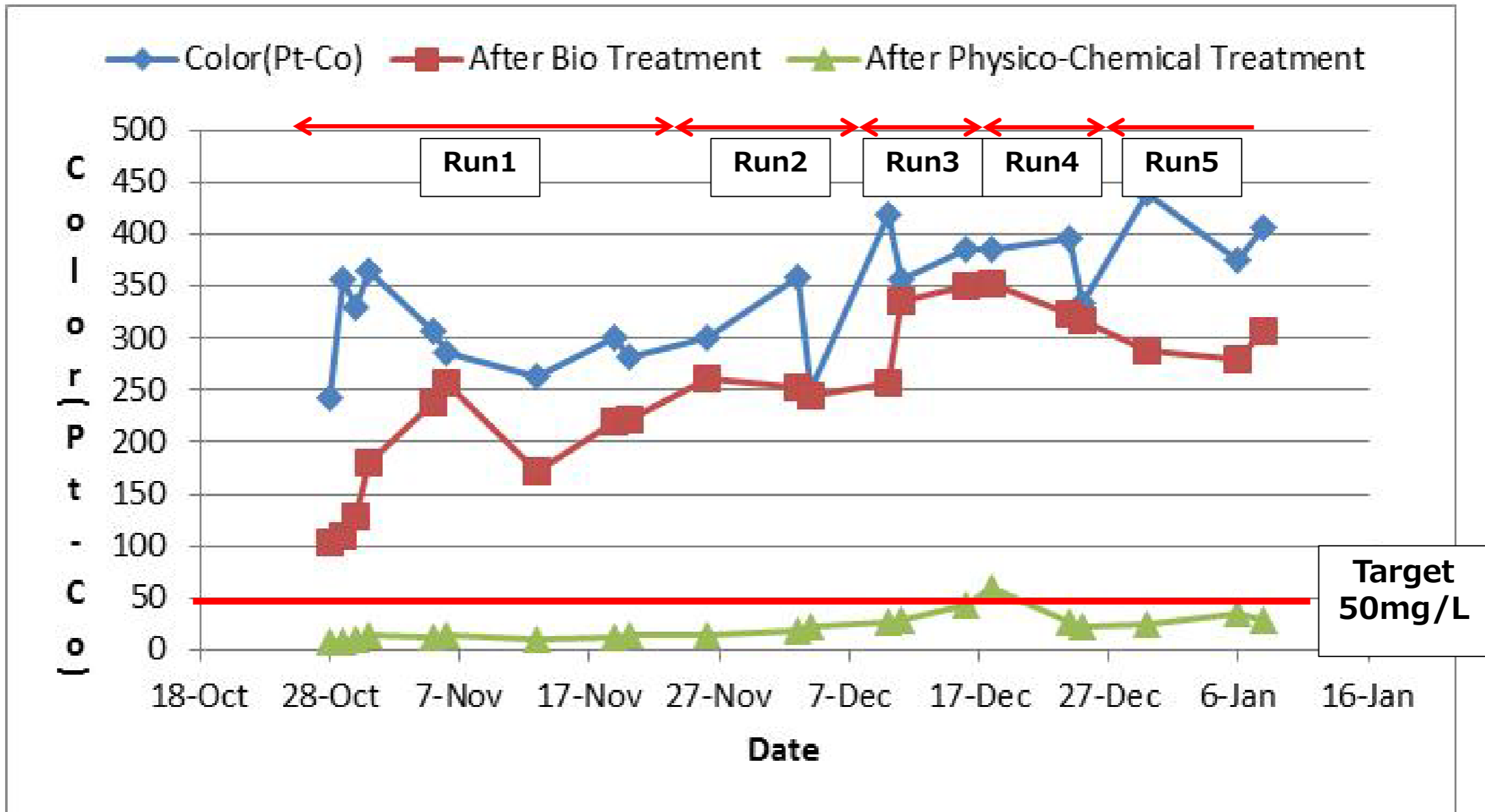


5. STEP1 Promotion of wastewater treatment(2)



Target
150mg/L

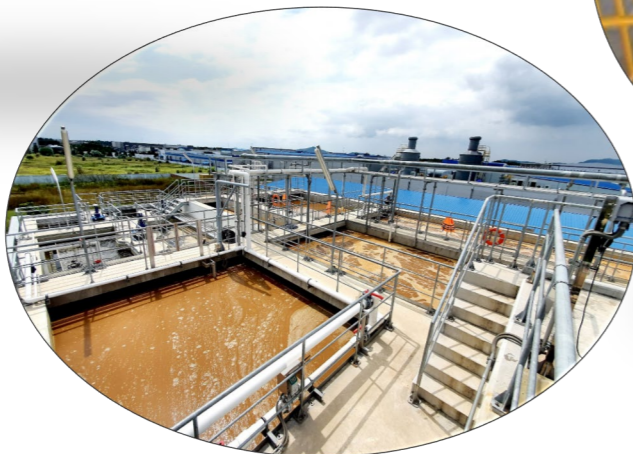
5. STEP1 Promotion of wastewater treatment(3)



5. STEP1 Promotion of wastewater treatment(4)

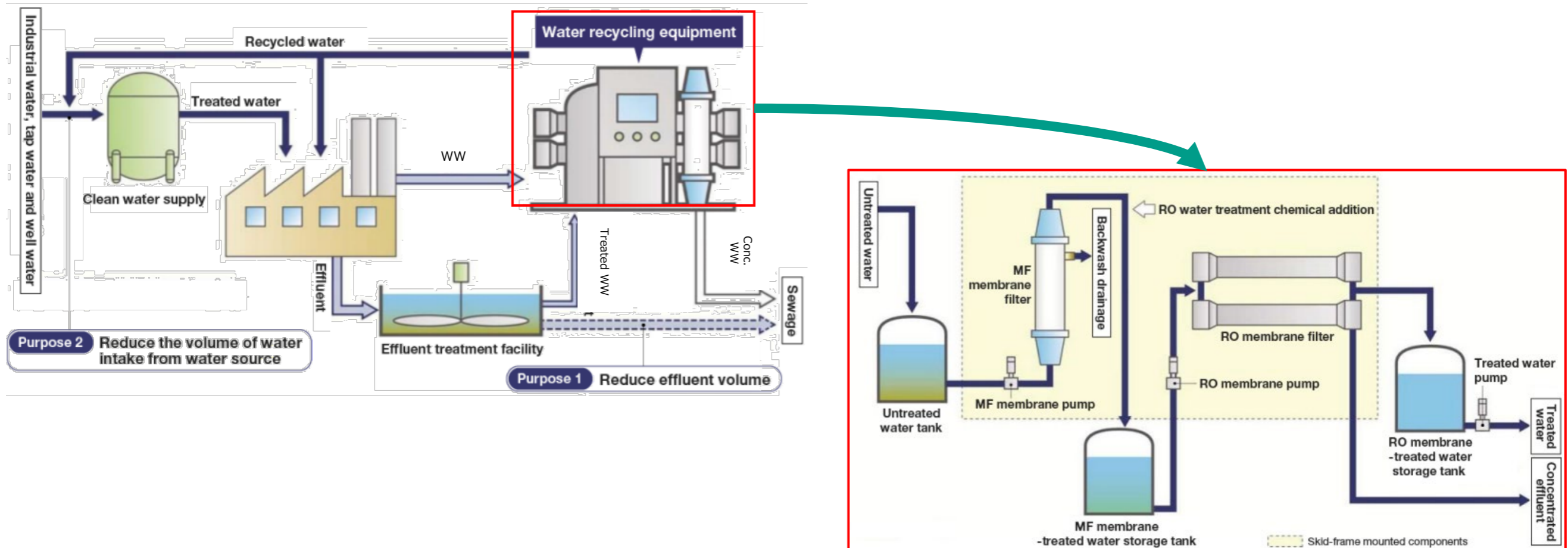
- After implementation of the model project, it has led to nearly 10 actual project orders.

After the study in
Model Project



6. STEP2 Wastewater Recycling (1)

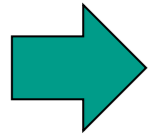
- As a second step, from FY2022, KOBELCO started new model project to promote “Recycle” of dyeing wastewater.
- By promoting wastewater recycling system, the environmental load can be reduced and it contributes to the development of dyeing industry.



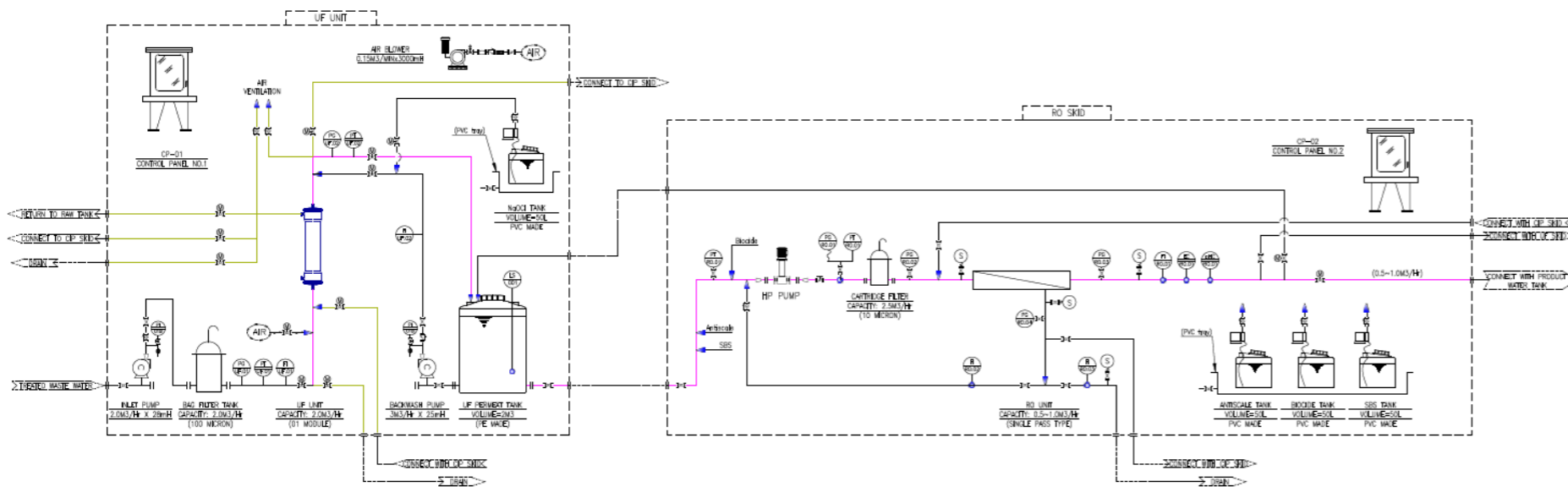
6. STEP2 Wastewater Recycling (2)

- KOBELCO fabricated pilot plant for wastewater recycling, then, installed the pilot plant in actual dyeing factory and conducted treatment study.

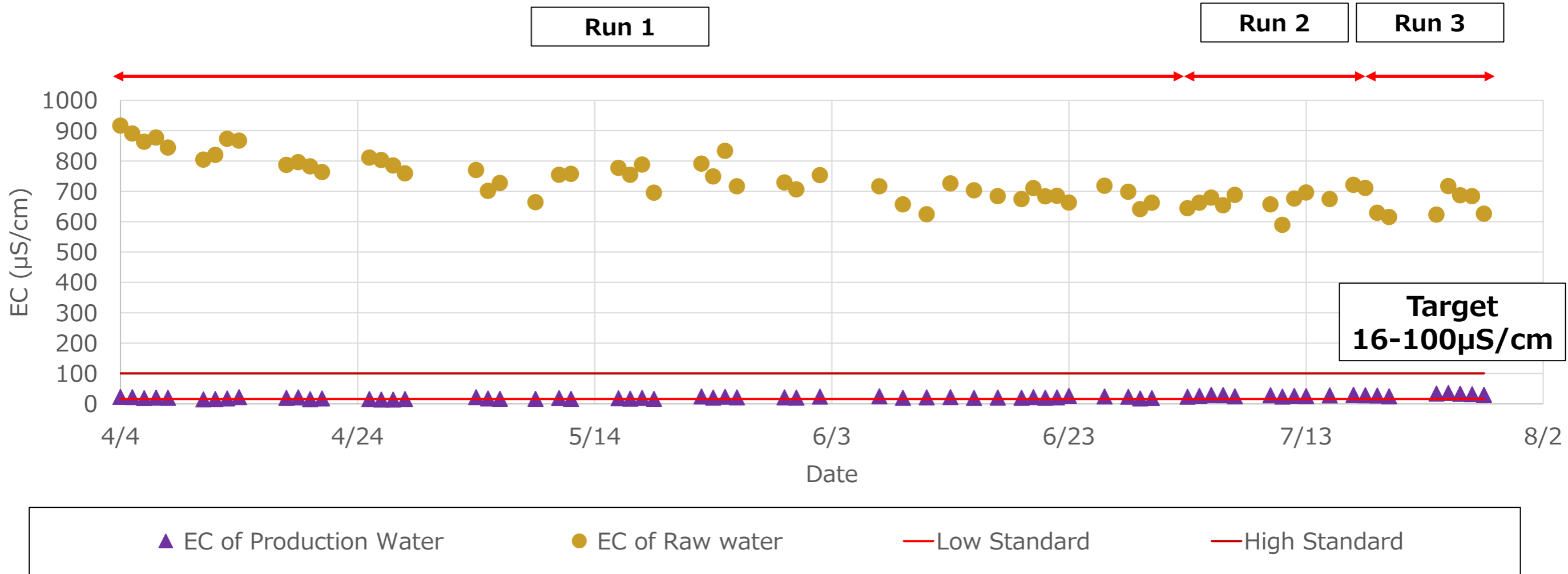
TARGET:



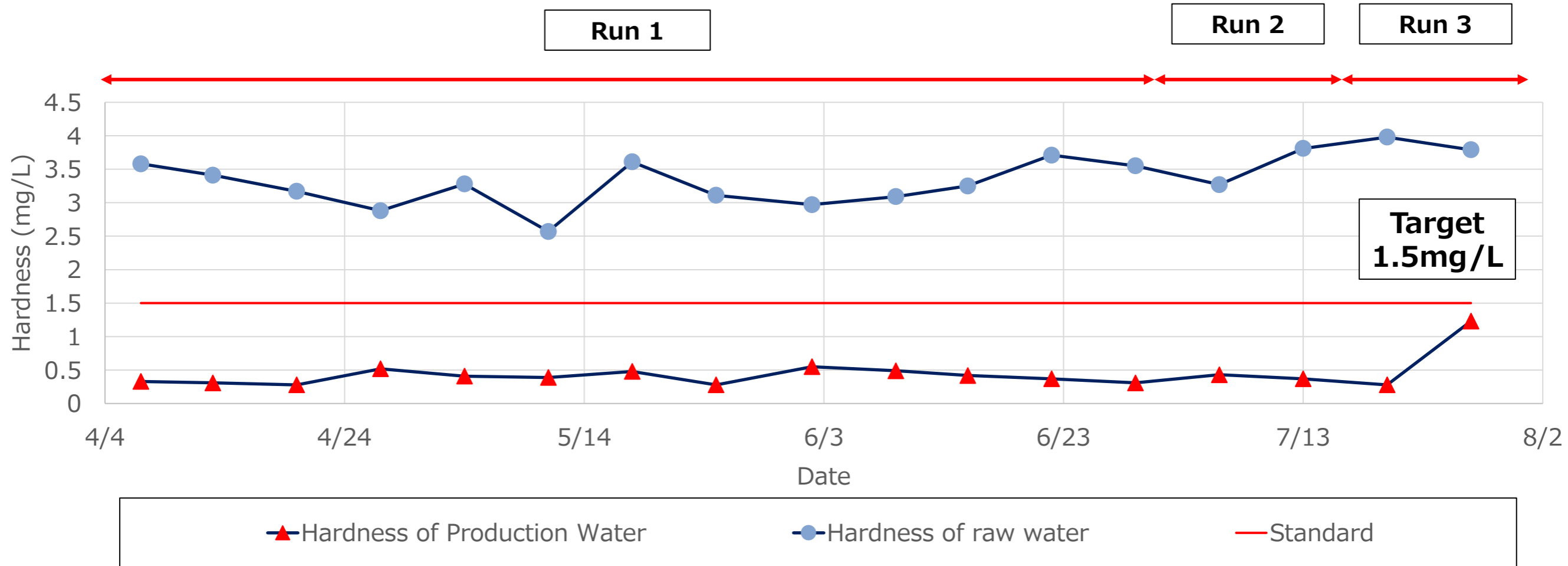
- Optimize treatment process, including the type of membrane
- Minimize operation cost and maximize recycle ratio



6. STEP2 Wastewater Recycling (3)



6. STEP2 Wastewater Recycling (4)



Thank you very much for your kind attention!

You can visit our website from the QR code below

