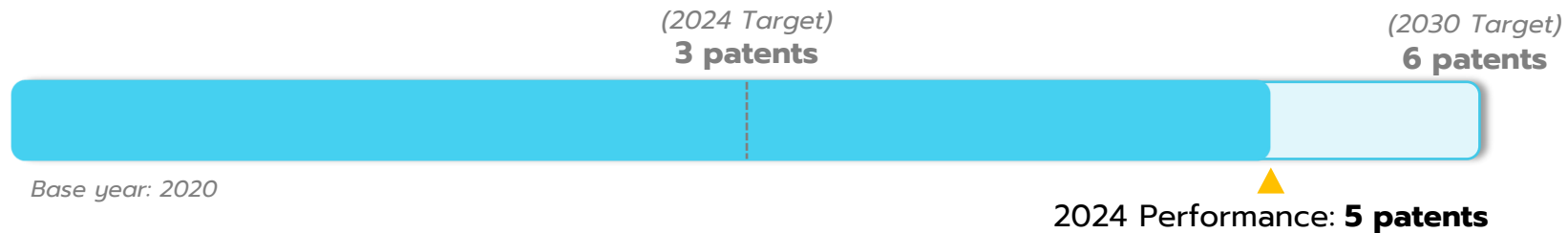


INNOVATION

Target and Performance

Long term target by 2030:

Register **6 patents or petty patents**



2024 Target:

3 patents or petty patents will be registered in 2025.

2024 Performance:



Of Target

5 of patent or petty patent are pending patent numbers.

1,261 of employees are innovators.

8 innovation projects contributed cost-saving **2,577 million Baht**.

Indicator

Indicator	2020	2021	2022		2023		2024	
			Makro	Lotus's	Makro	Lotus's	Makro	Lotus's
Innovators (person)	560	1,118	1,189	294	1,150	111	512	147
Innovations participate CP All and CPG Innovation Contest (No. of Project)	20	11	13	8	6	5	5	2
Award-winning innovations from CP All and CPG Contest (No. of Project)	10	6	11	6	6	2	5	1
Business impact (Million Baht)	315.04	3,975	3,882	1,507	1,369	1,208	20,483	29,250

Example of Patented Innovation



Ai-CC60 Chilled Thermotainer



Ai-CF40 Freezing Thermotainer

"Automated Ordering System to Improve On-Shelf Availability"

To address the issue of insufficient on-shelf inventory that leads to missed sales opportunities and unnecessary storage costs, the Company developed an Automated Ordering System. This system leverages Artificial Intelligence (AI) to accurately forecast sales and optimize inventory planning. By streamlining the ordering and inventory management process, the system reduces planning complexity, minimizes imbalances in stock levels, and enhances the Company's ability to respond promptly and consistently to customer demand. Through efficient resource utilization, the initiative has generated over 1 billion Baht in incremental sales annually compared to 2023.



2024 Result:

- **97%** better On-Shelf Availability Rate, incremental annual profit of **83,200,000 Baht** compared to 2023
- Over **1,280 million Baht** reduction in missed sales opportunities
- **138.9%** increased in Return on Investment (ROI)

"E2E Last-mile Intelligence Management System "

The Company has developed the E2E Operation Visibility Dashboard, an automated end-to-end delivery management analytics tool. Serving as a centralized data platform, the dashboard enables branches to manage last-mile delivery operations more efficiently by minimizing delays and reducing process errors. It provides real-time insights into delivery statuses and pending orders, enhancing the Company's capability to handle increased order volumes swiftly and accurately. This ensures timely responses to customer demands, strengthens the overall purchasing experience, and supports the sustainable growth of the online business channel.



2024 Result

- **30,210 hour/year** in reduced working hours, equivalent to **1,678,333 Baht/year**
- Over **5.7 million Baht/year** in total cost reduction
- **18,532,000,000 Baht** increase in sales compared to 2022