

# Environmental Performance

How to improve environmental performance by capacity building

Munich, November 2014



# Where are the hot spots? – Major environmental and social impacts are located in the supply chain



**> 8.000 litres  
of water**



**Social impacts**



**Chlorine  
bleaching,  
indigo dying,  
stone washing,  
etc.**



**> 20 kg of CO<sub>2</sub>-  
Emissions**

The latest Greenpeace report spotlights discount retailers



Experience in the development and implementation of training concepts



## Standardized *Capacity Building* Concepts



Standardized curriculum for factory management to achieve long term improvements



Online Platform for assessing and qualifying suppliers with respect to their environmental performance

## Customized *Capacity Building* Concepts

Webinar



E-Learning



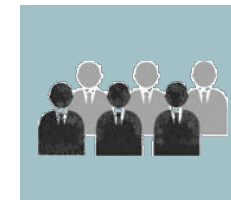
Video



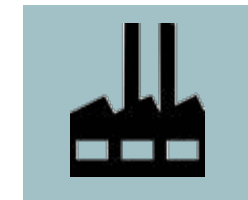
Handbook



Workshop



On-Site Training



Systain developed an *online capacity building tool* as an instrument for the "Carbon performance improvement initiative (CPI<sub>2</sub>)"



[www.cpi2.org](http://www.cpi2.org)

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# What does CPI<sub>2</sub> want to achieve?



Reducing environmental impact in supply chains by ***enabling factories*** to increase energy efficiency, improve chemical management and reduce water consumption



Energy



Water



Chemicals

At its core, the  $CPI_2$ -approach includes an online tool to support a systematic and ongoing improvement process



## 1 Online *self assessment*

- Systematic analysis of all production processes
- Assessment with increasing level of complexity
- User friendly interface

The screenshot displays a user interface for a self-assessment tool. At the top, there is a grid of assessment categories, each with an icon and a label. The 'Lighting' category is highlighted in green. Below the grid, a detailed view of the 'BASIC' assessment for 'Lighting' is shown. It includes a progress bar at 100% and a status of 'Completed'. The text indicates that collected energy consumption data is documented for the last 12 months. It lists requirements: monthly consumption data of all energy sources (electricity, fuels, gas, diesel, etc.), heat or steam from external providers, and related costs (total energy costs and per energy type). The assessment is labeled 'A1'. Navigation buttons 'PREVIOUS' and 'CONTINUE' are visible at the bottom.

At its core, the CPI<sub>2</sub>-approach includes an online tool to support a systematic and ongoing improvement process



## 1 Online *self assessment*

## 2 Online *evaluation and capacity building*

- Immediate access to relevant recommendations
- Enabling users through extensive library of supportive documents, tools and case studies





At its core, the CPI<sub>2</sub>-approach includes an online tool to support a systematic and ongoing improvement process



- 1 Online *self assessment*
- 2 Online *evaluation and capacity building*
- 3 Online *benchmarking*
  - Certification according to performance level
  - Carbon footprint



At its core, the CPI<sub>2</sub>-approach includes an online tool to support a systematic and ongoing improvement process



1 Online *self assessment*

2 Online *evaluation and capacity building*

3 Online *benchmarking*

- **The CPI<sub>2</sub>-tool is available in 6 languages!**
- **More than 500 factories in 18 countries are using the tool!**



# Jinnat Knitwear, member of the DBL group in Bangladesh wins the CPI<sub>2</sub> Factory of the Year award 2014 for outstanding performance



# Jinnat Knitwear, member of the DBL group in Bangladesh wins the CPI<sub>2</sub> Factory of the Year award 2014 for outstanding performance



- Extensive list of improvements e.g.
  - Maintenance, staff trainings and awareness campaigns
  - LED lighting and electronic ballasts
  - Servo motors and efficient belts on sewing machines
- Payback times of less than 12 months!
- **Savings of 900t CO<sub>2</sub> and 60.000 USD every year**

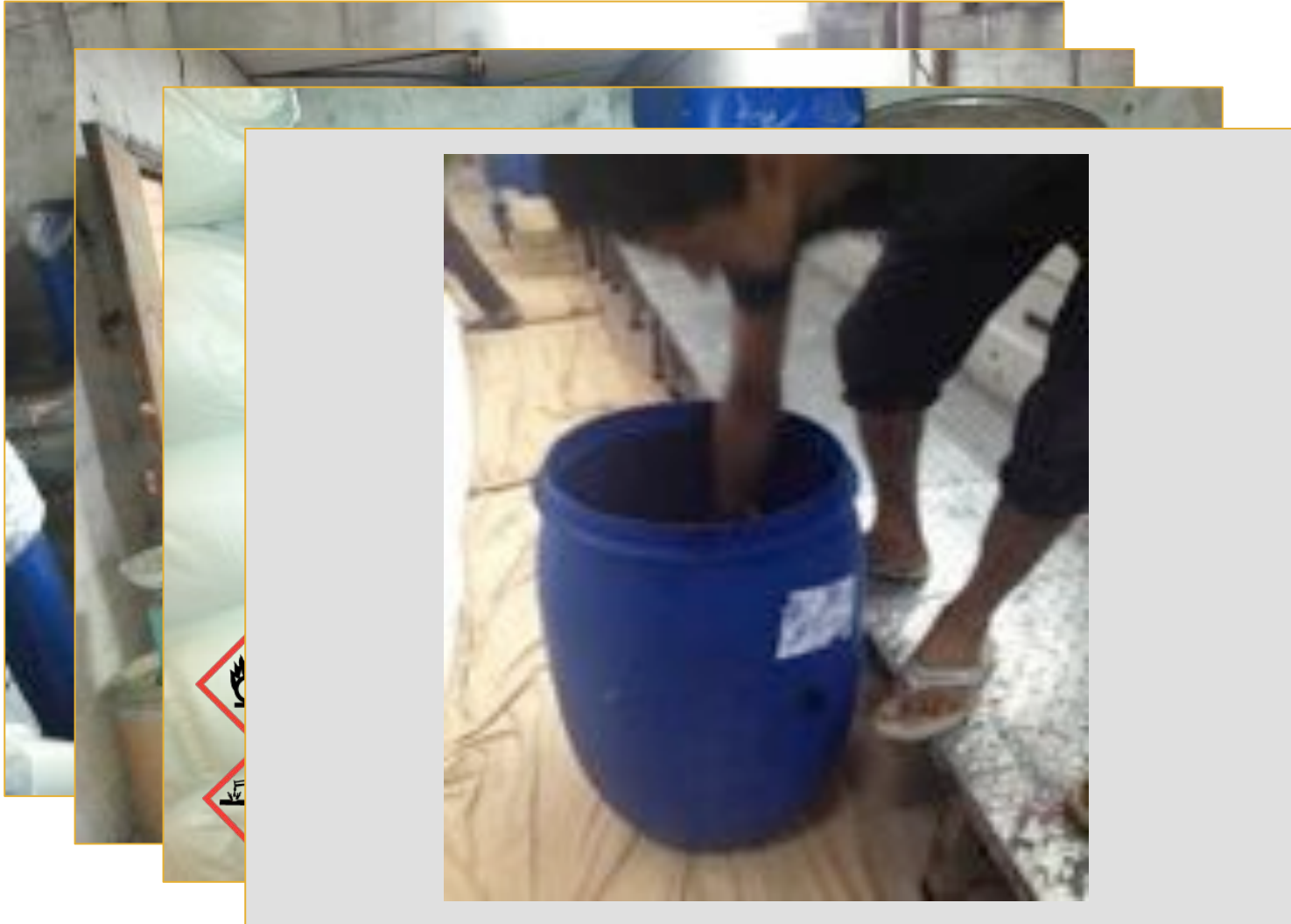


Verwendung von LED-Lampen



Servomotoren an Nähmaschinen

# On-site visits reveal the urgent need for improvement in terms of chemicals management



# Improving the chemical management on supplier level may pay off quickly

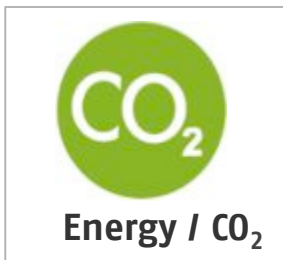


SYSTEMATICALLY IMPROVING THE SELECTION, STORAGE, HANDLING AND DISPOSAL OF CHEMICALS BRINGS BENEFITS



- ✓ Improved health & safety conditions for workers
- ✓ Cost reduction
- ✓ Improved product quality
- ✓ Reduced environmental impact

# CPI<sub>2</sub> will serve as a capacity building platform for chemicals handling



Energy / CO<sub>2</sub>



Chemicals



Water



CPI<sub>2</sub> covers the following topics:

## 1) Chemical Management

Chemical management system, RSL, MSDS, regulatory compliance, training

## 2) Selection and Use of Chemicals

Efficient use of chemicals, input of chemicals, cleaner technologies and methods (BAT), re-use of chemicals

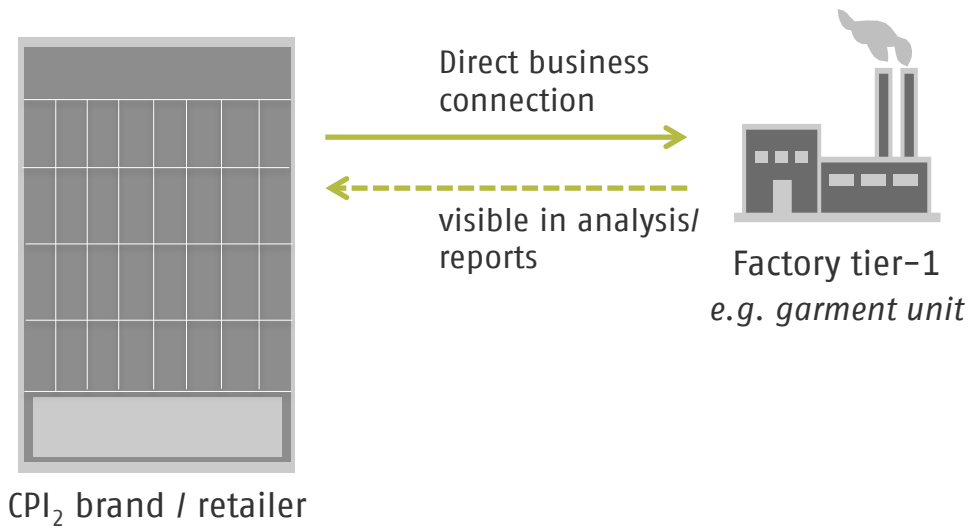
## 3) Storage and Handling of Chemicals

Documentation, safety-labeling, Health & Safety, air-extraction

## 4) Waste disposal

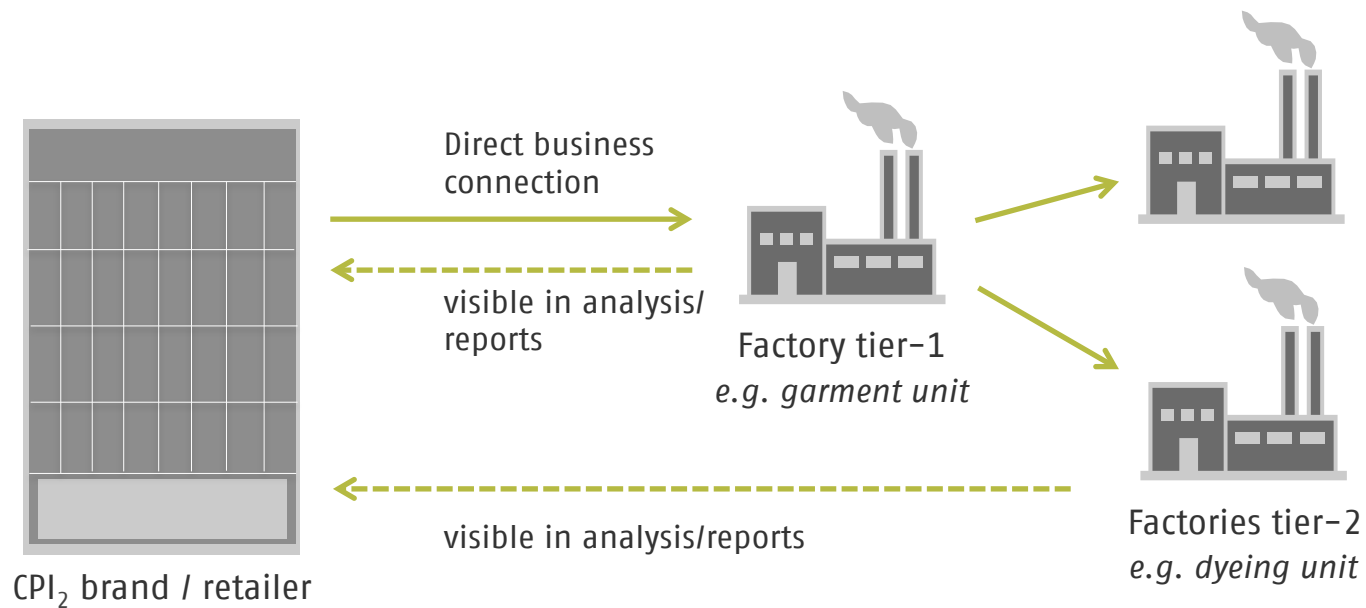
Treatment of left-overs and empty containers

# Creating performance transparency and initiate improvements immediately

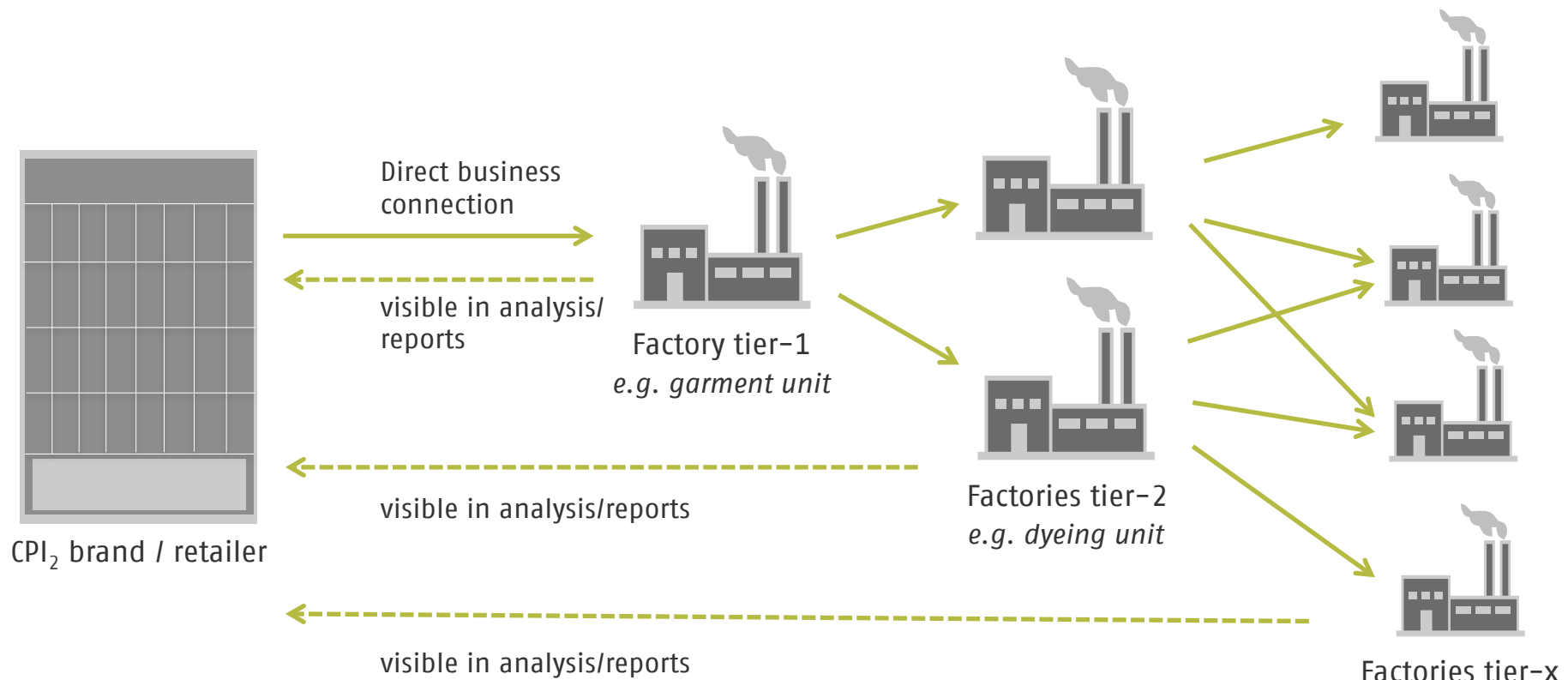




# Creating performance transparency and initiate improvements immediately



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**CPI<sub>2</sub>** System Implementation Evaluation

EVERYDAY DASHBOARD ADMINISTRATION & ANALYSIS

Website makes the relationship to your factories. You may link existing factories as well as define or delete existing ones. You are able to...

Default:

**FACTORY FACT SHEET**

Factory:	Foodbox factory	Country:	India
Factory ID:	12345	State / province:	Gujarat
Factory comment:	myCMT1	City:	Gujarat
Warden comment:	This is a comment...	Registration date:	01/01/2015
Address:	1234567 Street	Plant type:	Wastebox
Contact:	Mr. John Doe, john.doe@foodbox.com		
Postal Code:	82345678-9012-3456-7890-123456		

**WATER CONSUMPTION**

Factory:	Source water from	Year:	1,000,000
Electricity:	Assessment not finished	Wastebox year:	123,456
Factory comment:	Assessment not finished		
Implementation report:	Download	CO <sub>2</sub> plant with:	0.1 kg CO <sub>2</sub> per kg
Management report:	Download	Flying water:	0.1 kg CO <sub>2</sub> per kg

**CO<sub>2</sub> EMISSIONS (kg CO<sub>2</sub>)**

Source 1	10%
Source 2	20%
Source 3	30%
Source 4	40%

**CPI<sub>2</sub>** MAKE YOUR FACTORY A CPI<sub>2</sub> SUCCESS STORY!

Excellent  
Excellent  
12345  
India  
wastebox

**Energy**

**Basic**

	Recommendations	Saving potential	Easy to implement
Management	Purchasing policy with energy efficiency Consolidation of variable speed drives Identification of varying speed/torque	High	Low
Electricity Generation	Optimize use of natural daylight	Medium	High
Electric Motors	Purchasing policy with energy efficiency Consolidation of variable speed drives Identification of varying speed/torque	High	Low
Lighting	Create an overview of all lights Make light switches identifiable Optimize use of natural daylight	Medium	High
Compressed Air	Identification of varying speed/torque	Medium	Low
Waste Heat	Create an overview of all lights	Low	High
Flying Processes	Identification of varying speed/torque	Low	High
Weld	Create an overview of all lights	Medium	High
Transport Vehicles	Optimize use of natural daylight	Low	High

**Advanced**

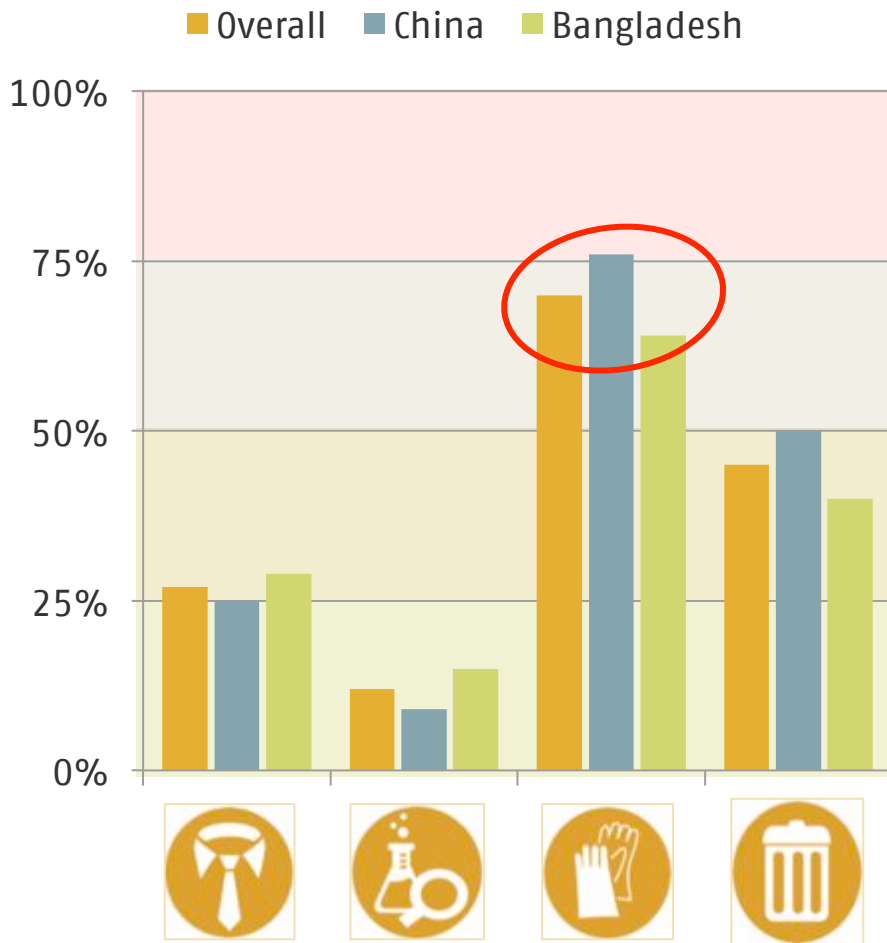
	Recommendations	Saving potential	Easy to implement
Management	Purchasing policy with energy efficiency Consolidation of variable speed drives Identification of varying speed/torque	High	Low
Electricity Generation	Optimize use of natural daylight	Medium	High
Electric Motors	Purchasing policy with energy efficiency	High	Low

The diagram outlines the savings benefits of implementing a recommendation (High/Low) and the implementation benefits (Medium/High/Low).

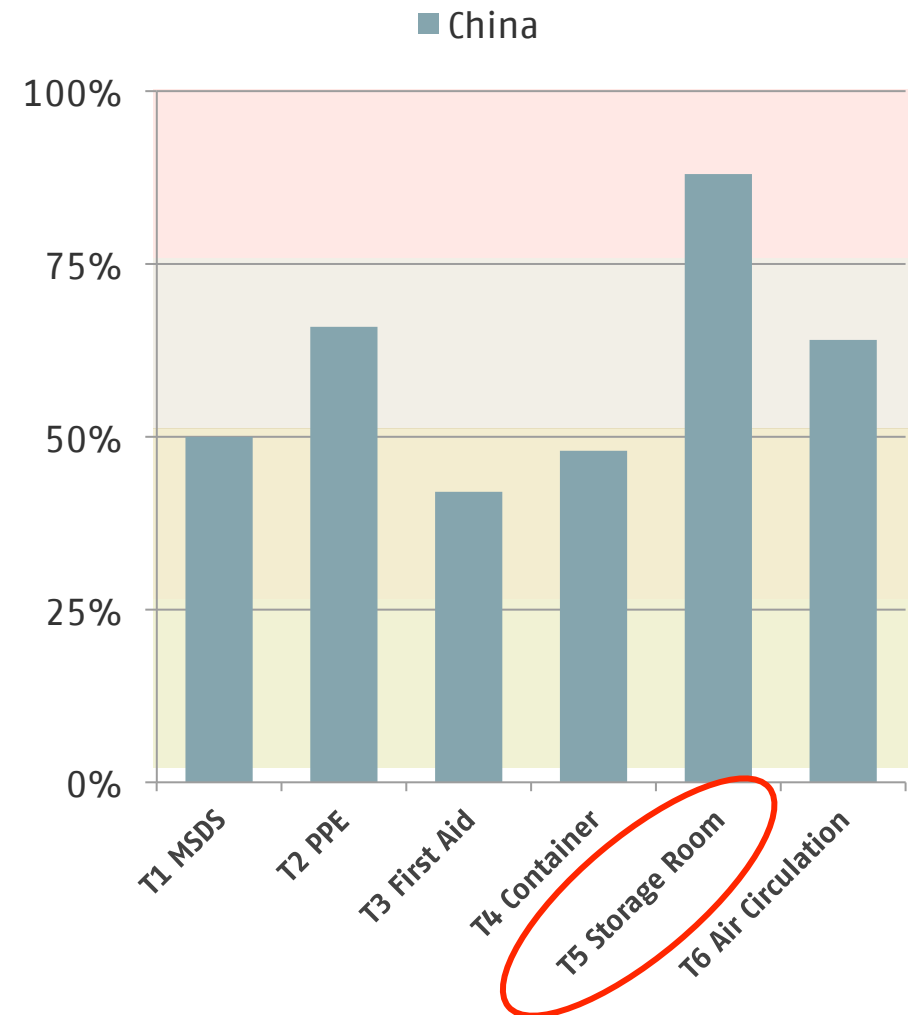
# Creating performance transparency and initiate improvements immediately



## Improvement requirements per performance area



## Where is improvement needed?



# Systain works with retailers and suppliers to develop customized capacity building solutions





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- Improving environmental performance is challenging
- Innovative tools can help to get started and to identify specific requirements
- Individual requirements need customized solutions