



Chemicals Management in textile and leather industry

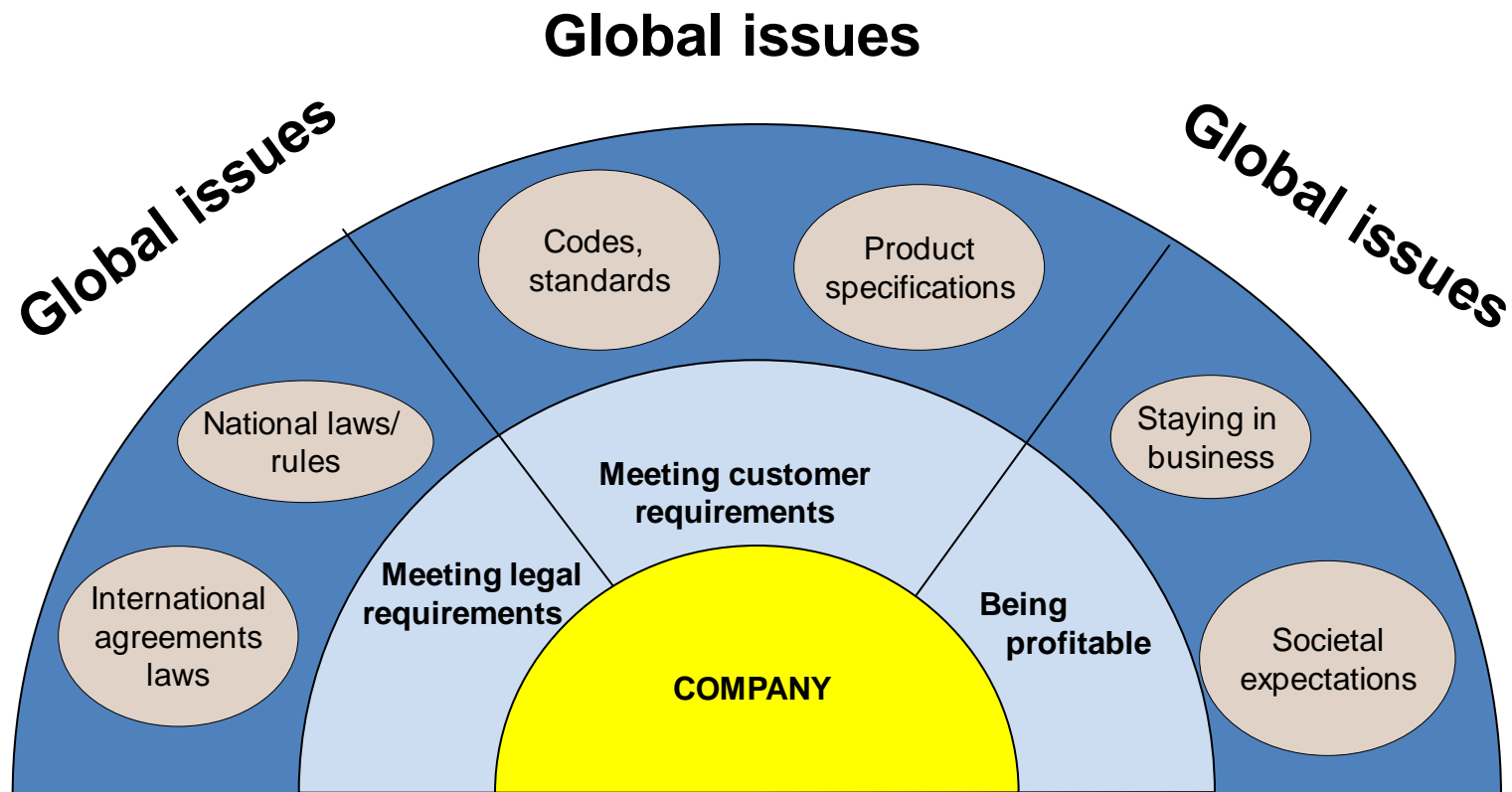
CHEMICAL MANAGEMENT SYSTEM SETTING THE FRAMEWORK



Towards higher resource efficiency and improved environmental performance in manufacturing and service industries

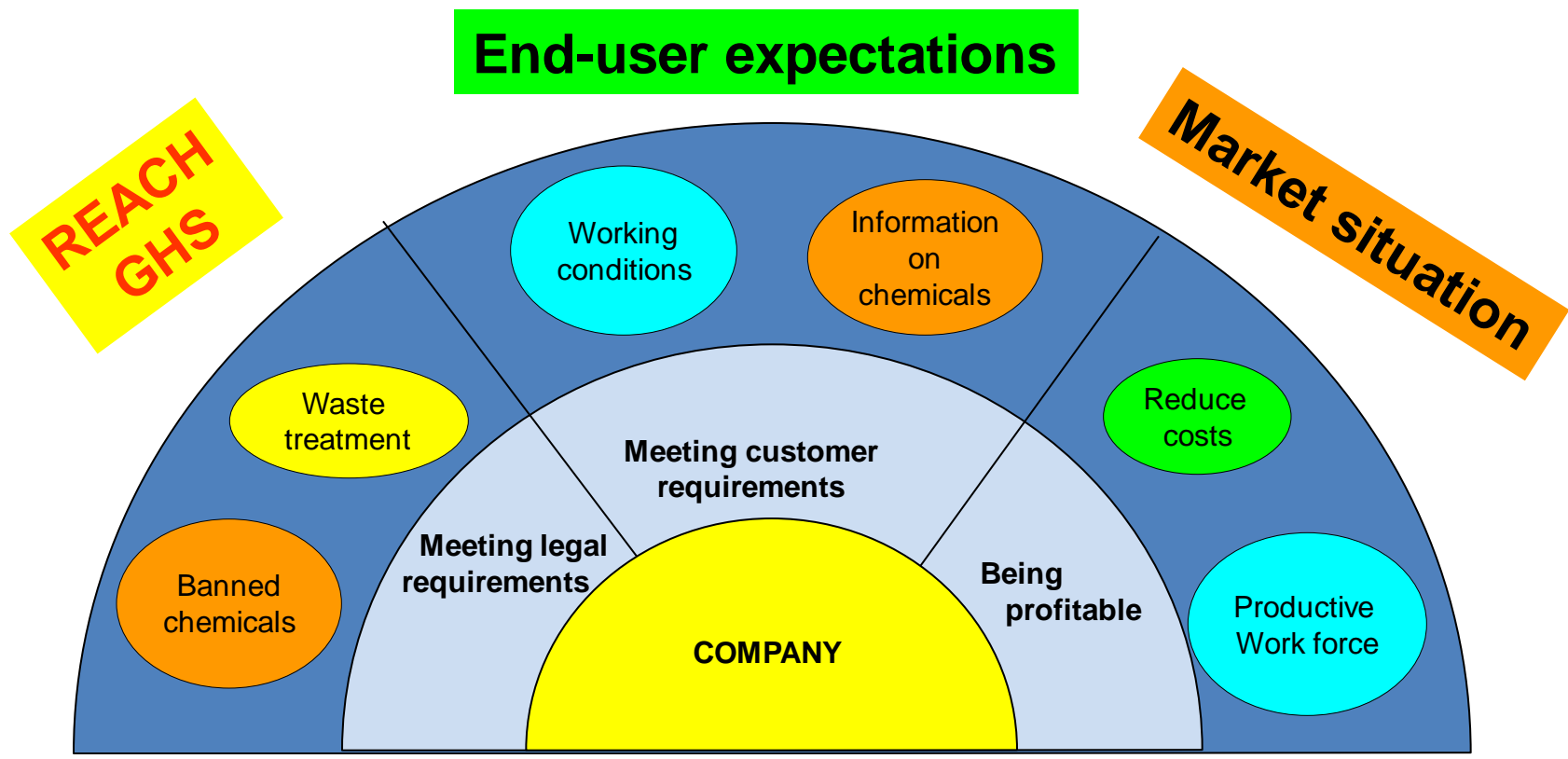
Resource Efficient Management of Chemicals (REMC)

Context of Chemical Management



Context of Chemical Management

Example



Context of Chemical Management



Conventions and international agreements



Agenda 21
Stockholm Convention
Rotterdam Convention
Basel Convention
ILO Convention 170
....

National legislation



Factory act, rules, regulations
Environmental legislation
Safety & health legislation...

Company level



Policies
Procedures
Practices
Supplier codes
....

Key conventions and agreements

- Earth Summit of Rio in 1992
 - Chapter 19 of Agenda 21 regarding management of toxic chemicals with regard to environment.
- Rotterdam Convention on PIC (Prior informed Consent)
 - Signed in Rotterdam in 1998, regulating control of certain chemical substances and pesticides which may pose hazards in international trade
- Stockholm Convention on POPs (Persistent Organic Pollutants)
 - Signed in Stockholm in 2001, regulating prohibition and reduction of specific organic substances (e.g. DDT, dieldrine, dioxines/ furans and PCB)
- Basel Convention
 - Came into force in 1992, regulating disposal and transboundary movement of hazardous waste
- ILO Convention 170 and Recommendations 177, 1990
 - Dealing with aspects of safety in use of chemical at work
- Montreal Protocol on Substances that Deplete the Ozone Layer
 - Signed in 1997, to protect the ozon layer by phasing the production of substances believed to be responsible for ozone depletion



Key conventions and agreements

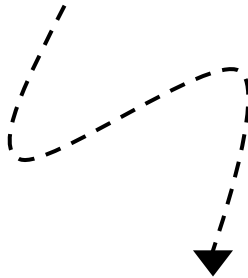
- Kyoto Protocol
 - an international treaty to the United Nations Framework Convention on Climate Change setting binding obligations on industrialised countries to reduce emissions of greenhouse gases.
- Strategic Approach International Chemical Management (SAICM)
 - International initiative launched in 2006, defining a policy framework to foster the sound worldwide management of chemicals.
- Globally Harmonized System of Classification and Labelling of Chemicals (GHS)
 - An internationally agreed-upon system, created by the United Nations, to replace the various classification and labeling standards used in different countries by using consistent criteria for classification and labeling on a global level.
- REACH
 - the European Community Regulation on chemicals and their safe use, dealing with the Registration, Evaluation, Authorisation and Restriction of Chemical substances, in force since June 2007
- Zero Discharge of Hazardous Substances (ZDHC)



ZDHC

“Zero Discharge of Hazardous Chemicals”

(ZDHC) is a collaborated industry response to social and customer pressures such as Detox.



Dozens of companies have together joined the roadmap to ZDHC.

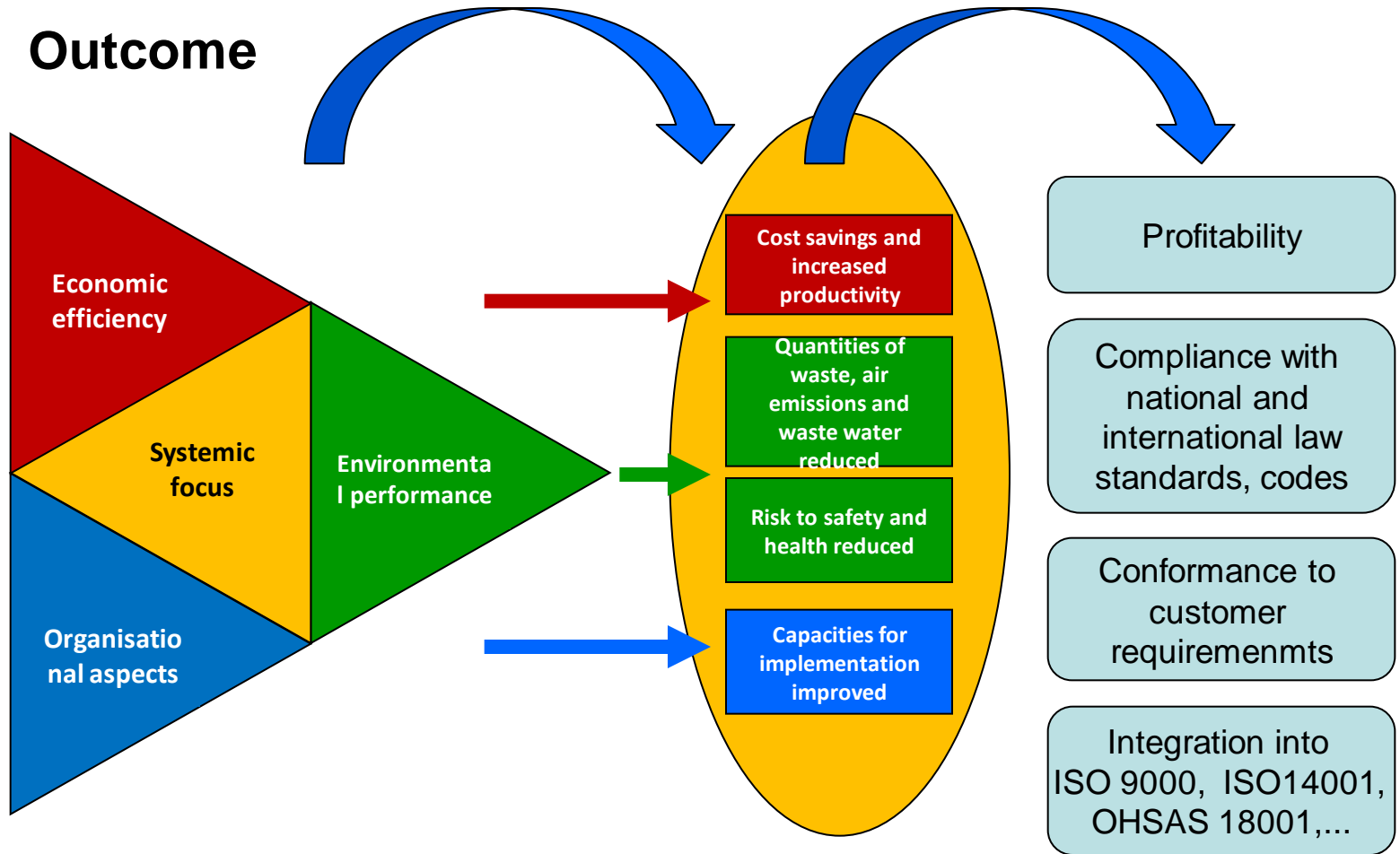


Image source: www.ecouterre.com

What you achieve through our programme...

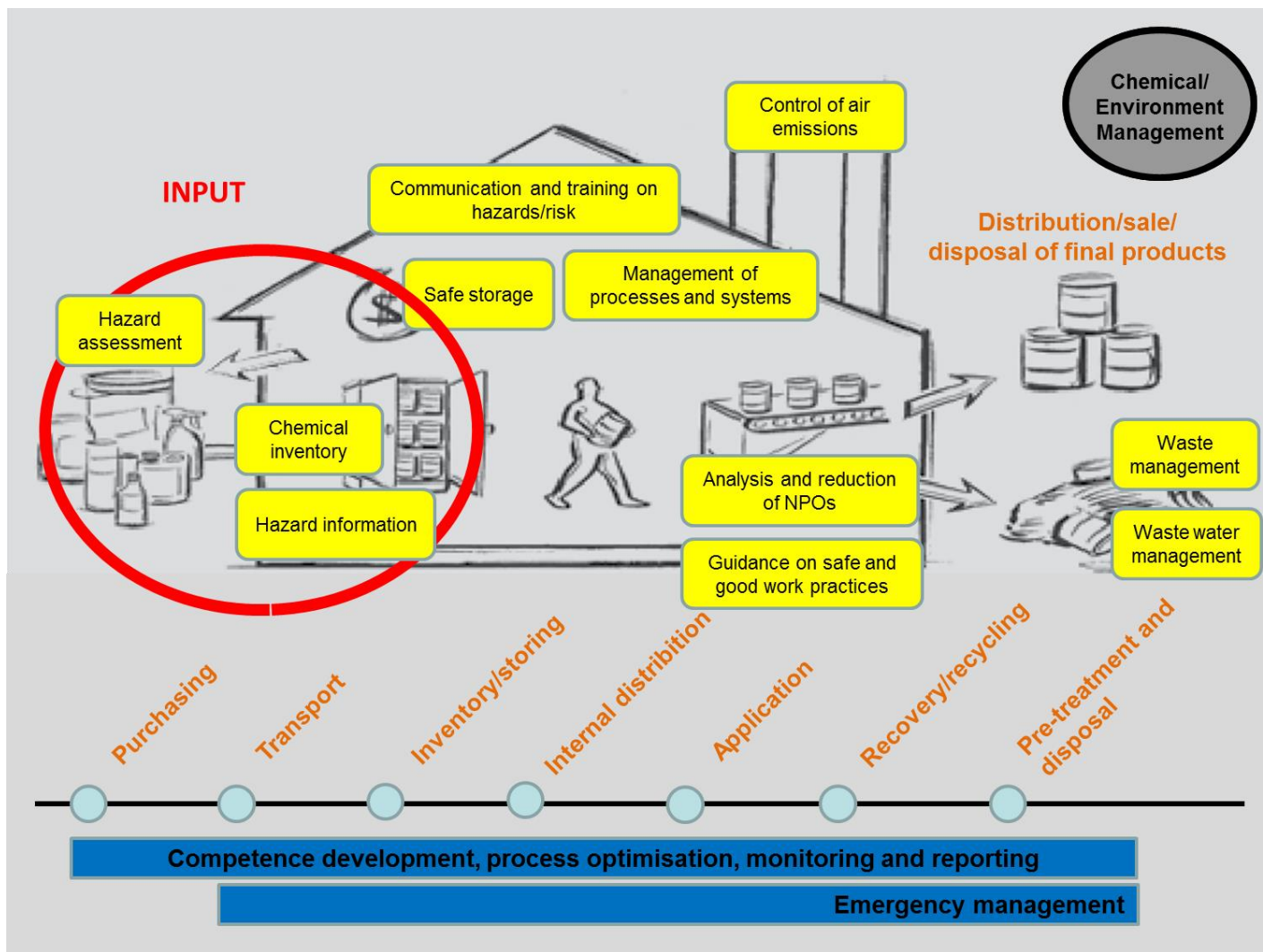


Outcome



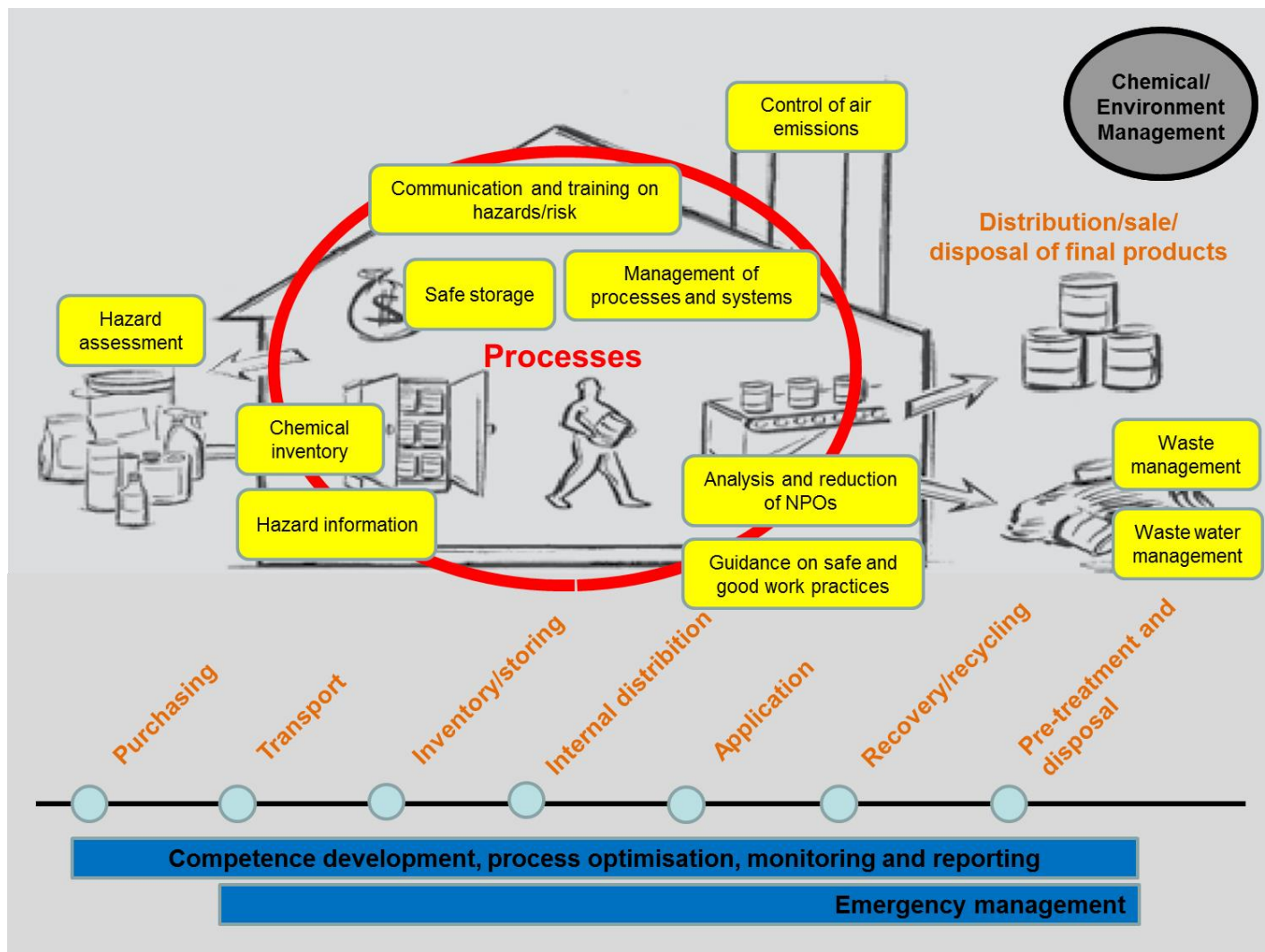
Environment Management

Factory level aspects



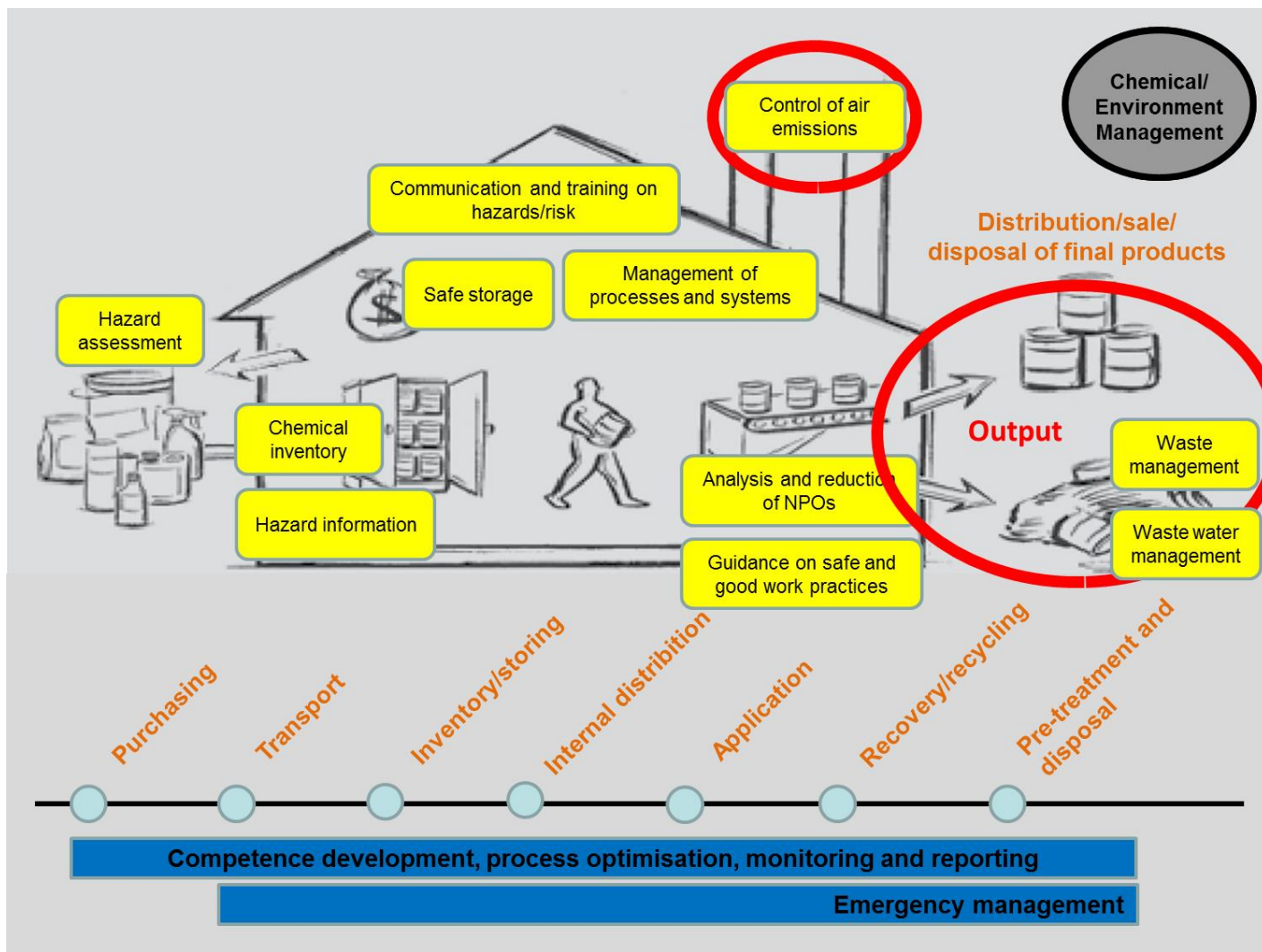
Environment Management

Factory level aspects

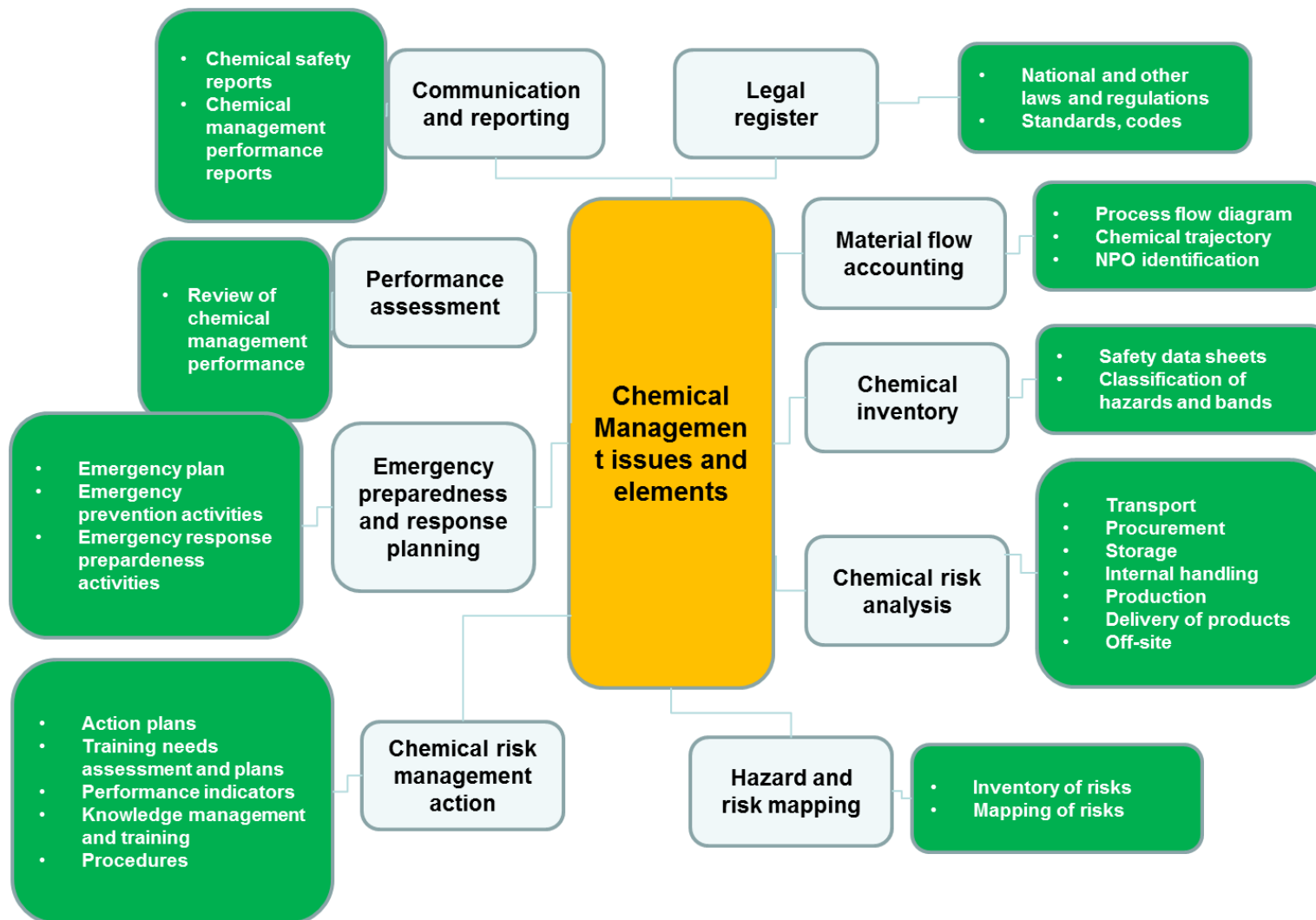


Environment Management

Factory level aspects



Areas of attention



Keep it simple and practical



Where are chemicals wasted?



Where are inefficient ways of handling?



Chemical Management



Where are risks to the environment?



Where are risks to health of workers?

Possible intervention areas...

- Purchase only the chemicals and amounts required
- Reduce inventories and store only what is almost immediately needed
- Improve inter-facility and intra-facility delivery of chemicals
- Reduce infrastructure costs
- Increase environmental regulatory compliance and decrease legal liability
- Facilitate data interchange within your company and within the supply chain
- Increase operational safety for workers and the community
- Streamline environmental compliance and reporting
- Enhance a corporate image of responsibility and safety
- Minimize hazardous waste disposal and related costs
- Automate repetitive and low-value tasks
- Conserve human resources for more value-added tasks



Starting points...



**...chemicals in
the effluent**



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Starting points...



....chemicals lost during processing



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Starting points...



....chemicals wasted during preparation and handling



?

Starting points...

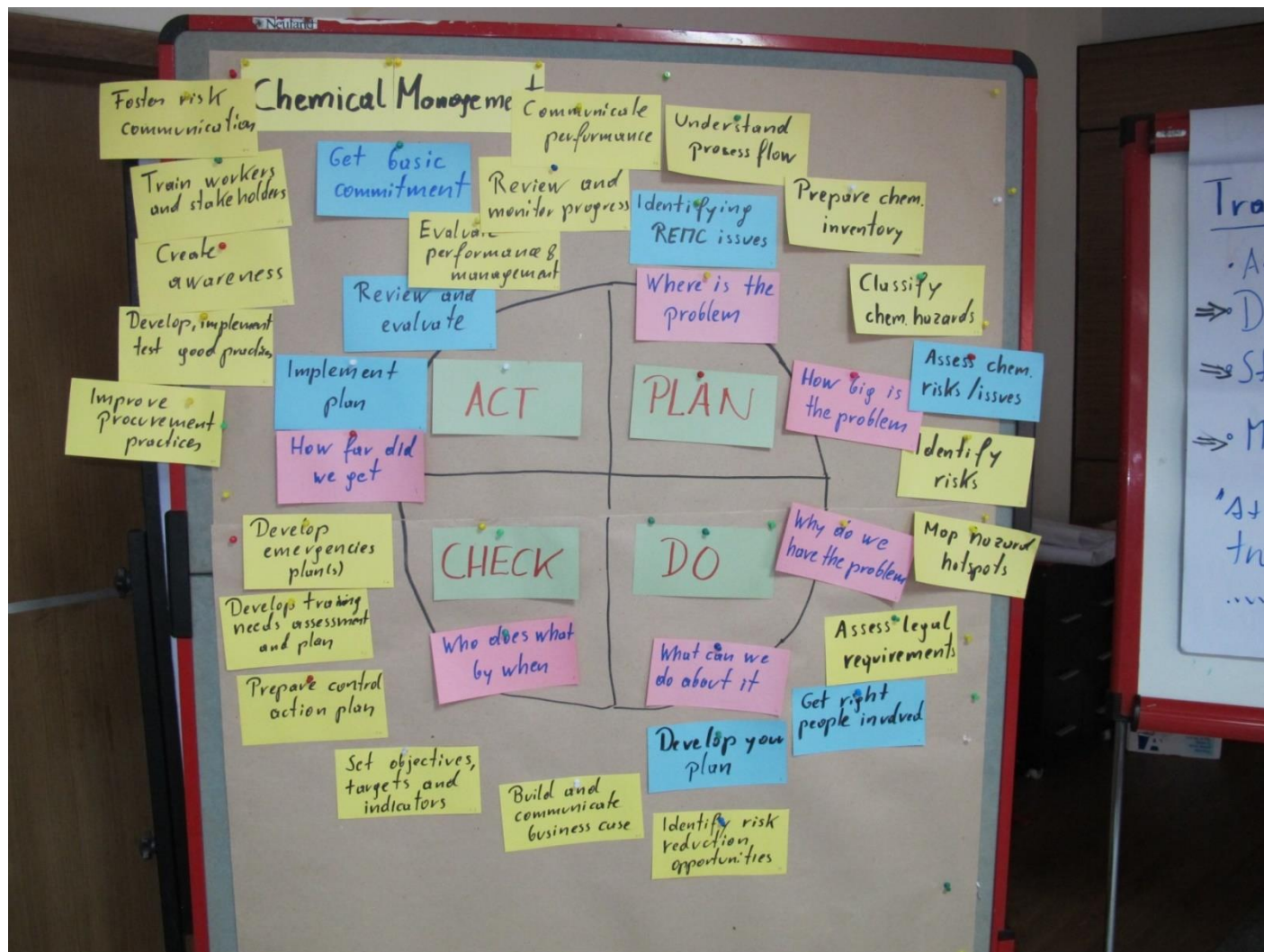


**....chemicals spoil
and damaged
during storage**

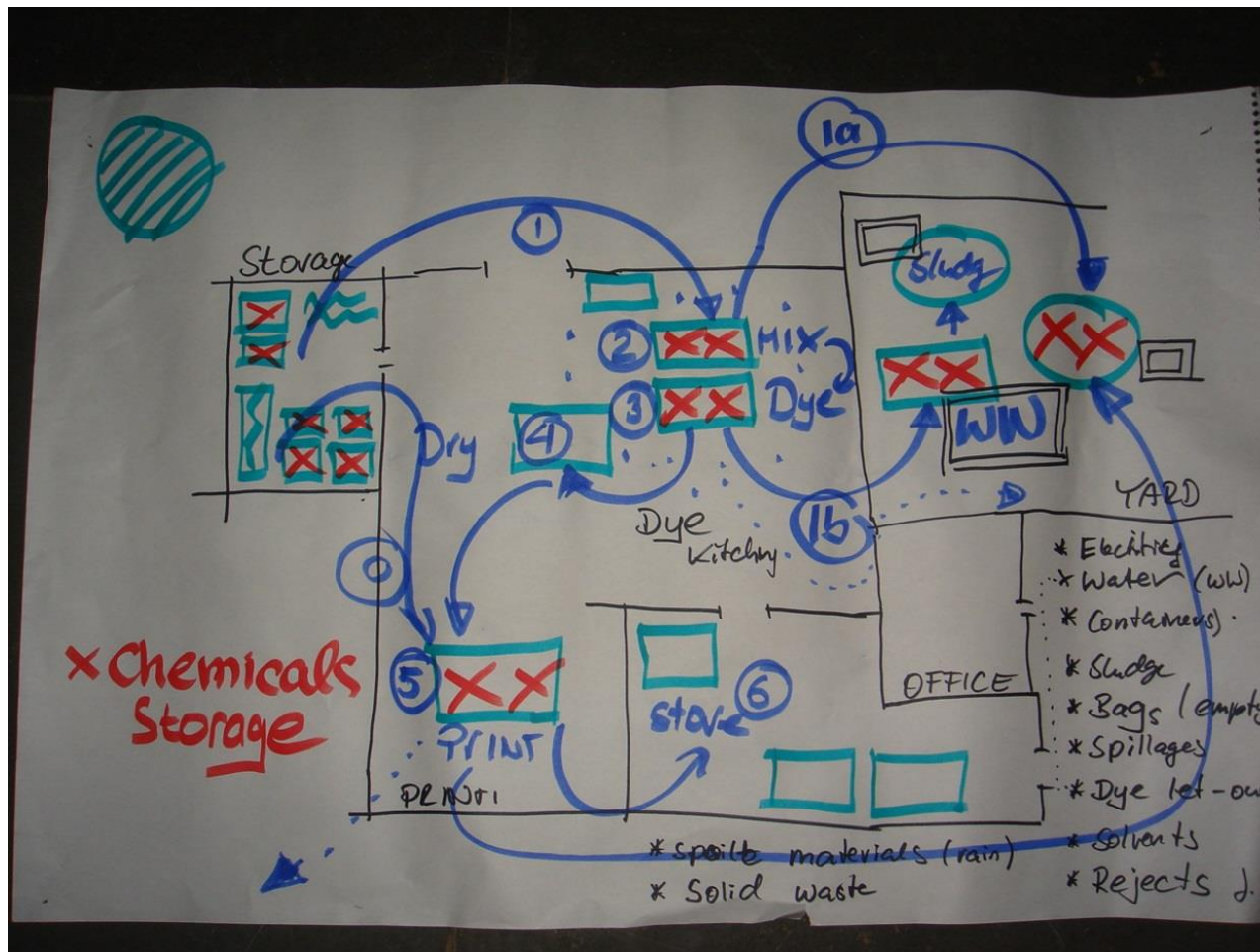


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Reflecting and using findings



Reflecting and using findings



For up-scaling and taking the next steps