

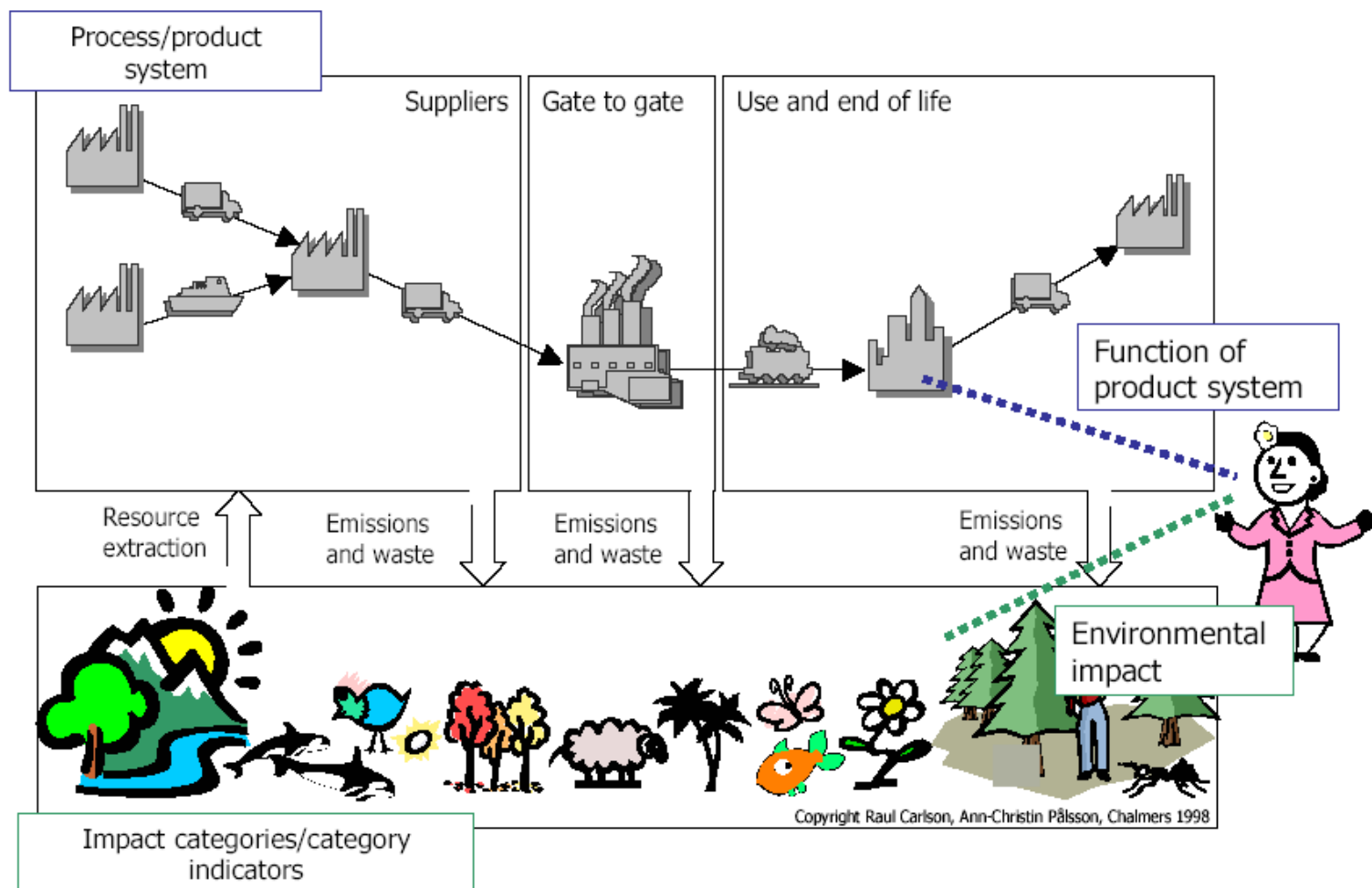
Life Cycle approach

When analysing or designing a product, all the phases of its life cycle have to be considered:



Source: National Institute of Standards and Technology

Input and output of the system



1.4. SCREENING ANALYSIS OF THE INPUT AND OUTPUT OF THE PRODUCT LIFE CYCLE

		Design stage	Pre-manufacturing	Manufacturing	Distribution	Use	End-of-life
INPUT	Energy						
	Materials						
	Water						
	Emissions to air						
	Emissions to water						
	Waste						
OUTPUT	Impact on health and safety - direct risks for people and their health and safety						
	Social impacts: community and its social capital, social exclusion, poverty, migration unemployment, etc.						

Evaluate inputs and outputs within specific phases of life cycle:

No impact	x		
High negative impact	- - -	High positive impact	+++
Medium negative impact	- -	Medium positive impact	++
Low negative impact	-	Low positive impact	+

GOAL: IDENTIFY AREAS WITH POSSIBLE POTENTIAL FOR IMPROVEMENT WHICH SHOULD BE FURTHER ANALYSED

Assumptions:

- **The pre-manufacturing phase** (cows breeding, milk production etc...) occurs in a local farm which already applies the Best Available Techniques, organic production and it is characterized by high environmental performances;
- The **distribution** is outsourced. Truck class EURO 4 are used for milk distribution;
- **The packaging** is 100% recyclable. No information is given to the consumers about the properties of the milk