





- 4.4.2.3 Ecological design
- 4.4.2.4 Industrial Symbiosis
- 4.4.2.5 Functional economics of services
- 4.4.2.6 Responsible Consumption
- 4.4.2.7 Product life extension
- 4.4.2.8 Efficient management of products and materials at end of life

### 3.2 defined product/service chain

The above, for each stage of the circular economy defined through product/service production and use cycle within the established context.

### 4. design of the circular economy system

Following the control plan, for each aspect (environmental-economic-social) a design is activated:

- of product/service
- of process;

This leads to the issuing of interventions:

- on the product/service: Shelf Live conditions, packaging, labelling, etc. are defined.
- on process management. The relative management procedures are issued.

### 5. Operations (8)

The operational management procedures hypothesized are those described below:

- 8200 commercial: activities and actions
- 8400 procurement: activity and actions
- 8500 production: activities and actions
- 8310 packaging and labelling: planning
- 8550 packaging and labelling: activities and actions
- 8551 supplying logistics: activities and actions
- 8553 distribution logistics: activities and actions
- 8555 arrivals warehouse: activities and actions
- 8557 shipment warehouse: activities and actions
- 8560 packaging: activities and actions
- 9100 controls and tests

### 6. performance evaluation (9)

An important operational step is the definition of measurement and control actions for the established management system.

### 7. replanning

Each year, given the achieved results, a plan for the following year is established through the management meeting and strategic decisions that may emerge.

## 2. management system

The management system that follows the above mentioned path can be created with the following procedures:

- 0000 introduction
- 4000 analysis of the context of the organization
- 4100 management of legislative permits
- 6000 planning risk management actions
- 6170 post market surveillance
- 6300 process risks validation
- 8300 design: circular product/service, FMEA, control plan (environmental, economic and social)
- 8310 packaging and labelling: design
- 7500 documented information software and ITC
- 8200 commercial: activities and actions
- 8400 procurement: activity and actions
- 8500 production: activities and actions
- 8310 packaging and labelling: planning

- 8550 packaging and labelling: activities and actions
- 8551 supplying logistics: activities and actions
- 8553 distribution logistics: activities and actions
- 8555 arrivals warehouse: activities and actions
- 8557 shipment warehouse: activities and actions
- 8560 packaging: activities and actions
- 9100 controls and tests
- 7120 human resources management
- 7134 material resources
- 7150 resources measurements
- 1020 preventive actions corrective actions
- 1030 management of market feedback (complaints)
- 8700 monitoring of non-compliance
- 9200 audits
- 9300 management meeting

### 3. certification

Once implementation has been completed, within the context of the above contextualization, the steps for certification are as follows:

1. request for quote to the certification institution with communication of:
  - object and field of application
  - context and reference limits
  - personnel involved and turnover involved
2. receipt and contractualization of the offer
3. step 1 audit by sending to the certification institution the following:
  - description of products/services and their management chain
  - management system (procedures and policy)
  - audit, management meeting
4. step 2 audit at the headquarters with respect to what has been established
5. implementation of actions resulting from the audit result
6. emission of certificate by the certification institution

### 4. useful support deriving from other certifications AND/OR ACTIVITIES

In addition to 9001 certification, which is useful as a basis, the following other certifications are considered important (almost necessary) in relation to the areas for the defined context.

#### For all aspects:

BS 8001: Framework for the implementation of circular economy principles in organizations - Guidance

This standard makes it possible to set up even a partial circular economy project within the organization in a case-study format and with the methodological possibility of identifying an ex ante and ex post circularity indicator for the activities involved.

#### Environmental aspect:

Certifications according to standards:

- ISO 14001 - Environmental management systems - Requirements and guidance for use
- ISO 50001 - Energy management systems - Requirements and guidelines for use

And also:

- Carbon Footprint / Carbon footprint of product/service and/or organization (ISO 14064 and ISO 14067)
- LCA - Life Cycle Assessment taking into account the following standards:
  - ISO 14040 - Environmental Management - Life Cycle Assessment - Principles and Framework
  - ISO 14044 - Environmental Management - Life Cycle Assessment - Requirements and Guidelines
  - Green Paper COM 2001/68/EC

- COM 2003/302/EC
- EMAS (Reg. 1221/2009) and
- Ecolabel (Reg. 61/2010).
- EPD: Environmental Product Declaration (EPD®) is a voluntary product certification scheme, developed in application of ISO 14025 (Type III environmental labelling), according to the International EPD System Program. It is also based on LCA studies of the product/service involved in the EPD environmental declaration.

**Economic aspect:**

This aspect must be defined on a case-by-case basis, taking into account the chain involved and the target market.

**Social aspect:**

Certification according to:

- SA8000 - Social Accountability International. The standard takes into account, from an ethical risk point of view, the following main elements: child labor, forced labor, health and safety at work, freedom of association and right to collective bargaining, discrimination, disciplinary practices, working hours and remuneration criteria
- UNI ISO 26000 - the ISO guideline on Social Responsibility of Organizations

In addition to:

- ISO 45001 - Occupational health and safety management systems - Requirements and guidance for use
- AA 1000 - the Sustainability Assurance Standard created by the UK's ISEA
- OECD - Guidelines for Multinational Enterprises
- ISO 28000 - Specification for Supply Chain Security Management Systems