

**Building Industry Consultative Council  
Training & Research Centre**

**BEST ENVIRONMENT MANAGEMENT  
PRACTICE FOR THE BUILDING AND  
CONSTRUCTION SECTOR – PAGES 611**

**European Commission –  
JOINT RESEARCH CENTRE**

**Institute for Prospective Technological Studies  
Sustainable Production and Consumption Unit**

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# **THE HEART OF THE DOCUMENT IS THE 'BEST ENVIRONMENTAL MANAGEMENT PRACTICES (BEMPs) - 1**

**BEMPs to improve the environmental  
performance of the construction activity  
through better land planning and  
integration with urban sustainability  
objectives (Chapter 2)**

**BEMPs to improve the building design  
(Chapter 3)**

# **THE HEART OF THE DOCUMENT IS THE 'BEST ENVIRONMENTAL MANAGEMENT PRACTICES (BEMPs) - 2**

**BEMPs to improve the  
sustainability of construction  
products (Chapter 4)**

**BEMPs to improve the  
environmental performance of the  
construction process (Chapter 5)**

**THE HEART OF THE DOCUMENT IS THE  
'BEST ENVIRONMENTAL  
MANAGEMENT PRACTICES (BEMPs) - 3**

**BEMPs to improve operation  
and maintenance of buildings  
(Chapter 6)**

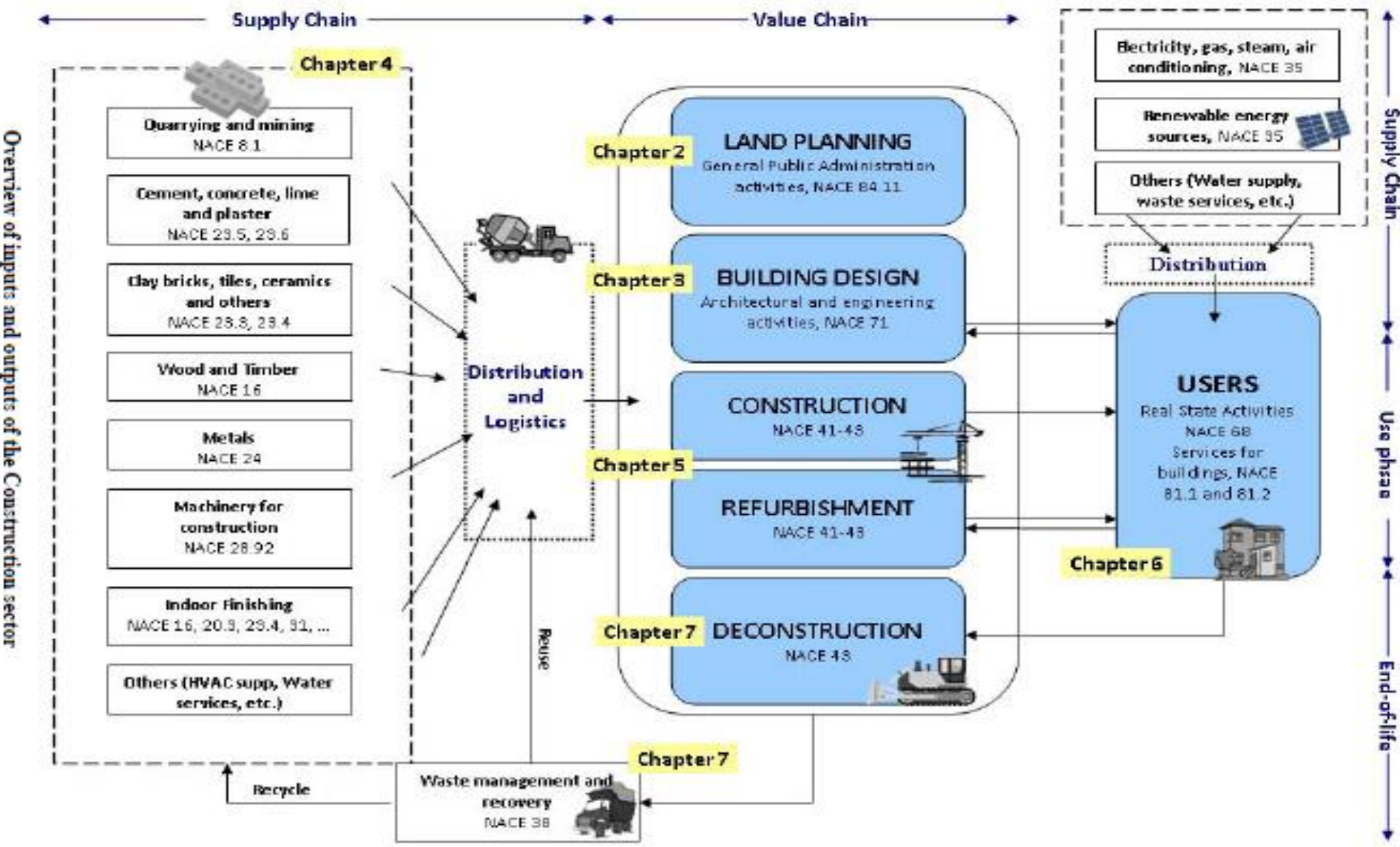
**BEMPs to improve building  
deconstruction (Chapter 7)**

**THE HEART OF THE DOCUMENT IS THE  
'BEST ENVIRONMENTAL  
MANAGEMENT PRACTICES' (BEMPs) - 4**

**An additional chapter highlighting  
the links between Civil Works and  
building construction is included.**

**(Chapter 8)**

# OVERVIEW OF INPUTS AND OUTPUTS OF THE CONSTRUCTION SECTOR – Fig. 1



# **ADDITIONAL CHAPTERS - 1**

**Chapter 1: contains general information about the construction sector such as data on turnover and employment as well as the direct and indirect environmental aspects which are illustrated by means of the overview of the inputs and outputs.**

# **ADDITIONAL CHAPTERS - 2**

**Chapter 9:** dwells on emerging techniques, some techniques concerning the improvement of building design are described.

**Chapter 10:** of the SRD provides a brief overview for micro-, small-and medium-sized enterprises.



# ADDITIONAL CHAPTERS - 3

**Chapter 10:** specifically lists the applicability of the BEMP techniques described in this document to SMEs, and highlights any restricting factors particularly relevant to micro-enterprises and SMEs. Options to facilitate SMEs with environment-related investments are referred to.

# **ADDITIONAL CHAPTERS - 4**

**Chapter 11: of the SRD contains concluding tables that compile the information from BEMPs description.**

**Conclusions are drawn with respect to key environmental performance indicators and benchmarks of excellence.**

# **BUILDING PLANNING**

**Build in brownfields, minimise the space between buildings.**

**Refurbishment of unused buildings, adding floors, improving the quality of land use, etc. to avoid urban sprawl,**

**Harvest rainwater, reuse it and recycle grey water.**

# BUILDING DESIGN - 1

**Reduce soil sealing and avoid undesired impacts over natural spaces.**



## **BUILDING DESIGN - 2**

**Prevent waste generation during construction through designing out waste techniques, as modern methods of construction, reducing extensively the environmental impact of the construction site.**

# **BUILDING DESIGN - 3**

**Building is designed out to prevent waste during design and for best recycling and reuse at deconstruction as per section 3.4.7.**

# BUILDING CONSTRUCTION - 1

**Less than 5 % of recyclable material is sent to landfill or incineration without energy recovery.**

# BUILDING CONSTRUCTION - 2

**Dust prevention efficiency is higher than 90 % according to the methodology defined in section 5.6.2.5.**



# BUILDING CONSTRUCTION - 3

**Reduce disturbance to the Neighbourhood, especially in sensitive areas, as residential areas or sites close to natural spaces.**

# BUILDING CONSTRUCTION - 4

**Reduce noise and vibration by establishing appropriate prevention and mitigation measures.**

# **BUILDING CONSTRUCTION - 5**

**Reduce night lighting by re-scheduling works when it is adequate, screens and directional lighting.**

# BUILDING CONSTRUCTION - 6

**Prevent odours and air emissions avoiding fires, stopping machinery not in use and keeping good practices for chemicals and fuels.**

# **BUILDING CONSTRUCTION - 7**

**Select machinery with high energy efficiency and with low associated emissions, especially regarding to NOx and particulate materials.**

**Establish procedures for complaint management.**

# CONSTRUCTION PRODUCTS - 1

Use environmental selection criteria for materials, products and construction elements attending to the performance of their supply chain, distribution and transportation distance.

# CONSTRUCTION PRODUCTS - 2

**The performance during use (toxicity, release of pollutants, energy performance, noise protection and other indoor quality requirements).**

# CONSTRUCTION PRODUCTS - 3

**The recyclability at the end of building lifetime.**



# CONSTRUCTION PRODUCTS - 4

**The performance of paints, wood and floor coverings are deeply described in the document.**

# **BUILDING DE-CONSTRUCTION**

**Deconstruct and demolish building selectively, maximizing the amount of salvaged materials and the recyclability of obtained wastes.**

# **Tasks to be undertaken by each member of the EUROCODE WORKING GROUP -1**

**Chapter 1 – General Information About the  
Construction Sector & EMAS  
Implementation - 21 Pages**

**Chapter 2 – Land Planning – 30 Pages**

**Chapter 3 – Building Design – 200 Pages**

**Chapter 4 – Construction Products - 34 Pages**

# **Tasks to be undertaken by each member of the EUROCODE WORKING GROUP - 2**

**Chapter 5 - Construction & Refurbishment – 149 Pages**

**Chapter 6 – Building Operation  
& Maintenance – 31 Pages**

**Chapter 7 – Building End-of –Life – 43 Pages**

**Chapter 8 – Civil Works – 15 Pages**

**Chapter 9 – Emerging Techniques – 14 Pages**

# **Tasks to be undertaken by each member of the EUROCODE WORKING GROUP - 3**

- Chapter 10 – Micro, Small & Medium  
Sized Enterprises – 7 Pages**
- Chapter 11 – Conclusions – 10 Pages**
- Chapter 12 – Glossary – 1 Page**
- Chapter 13 – Annexes – 2 Pages**