

# MODULE 3

## Technical implementation phase

**Interreg**  
Baltic Sea Region



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SUSTAINABLE WATERS

NonHazCity 3

# Contents of Module 3

3.1. Design phase

3.2. Detailed planning

3.3. Construction

3.4. Verification



## Strategic planning phase

## Technical implementation phase

Three pillar approach for tox-free, circular and climate friendly public procurement

Utilization of Green Building Certificates and Eco-labels

Supply chain communication & Market dialogue

Needs investigation

Vision, ambitions

Market analysis

Market dialogue

Decision

Market consultation

Check on ambitions

Framework for implementation

Technical specifications

Conceptual decision

Design

Detailed planning

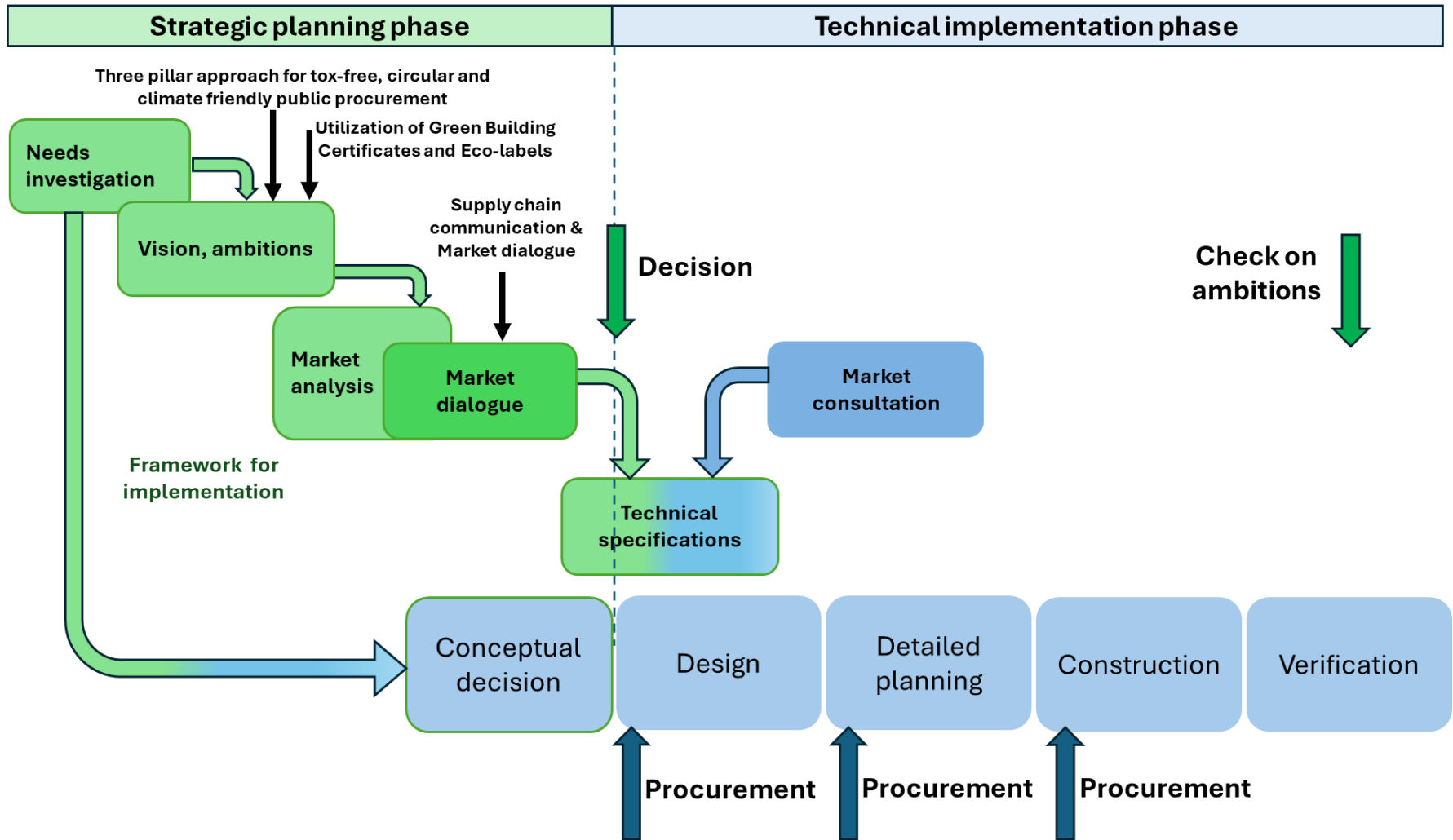
Construction

Verification

Procurement

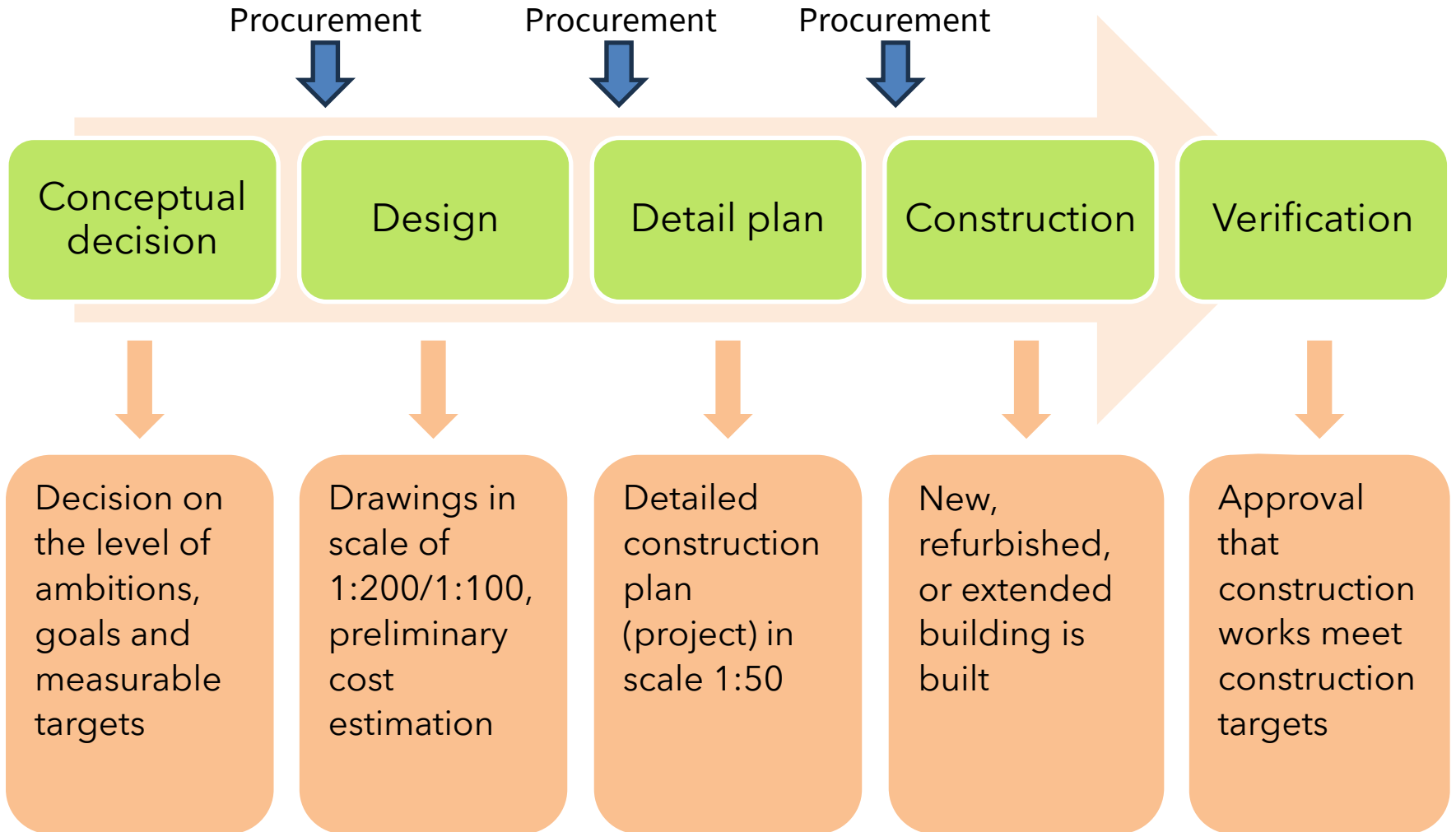
Procurement

Procurement

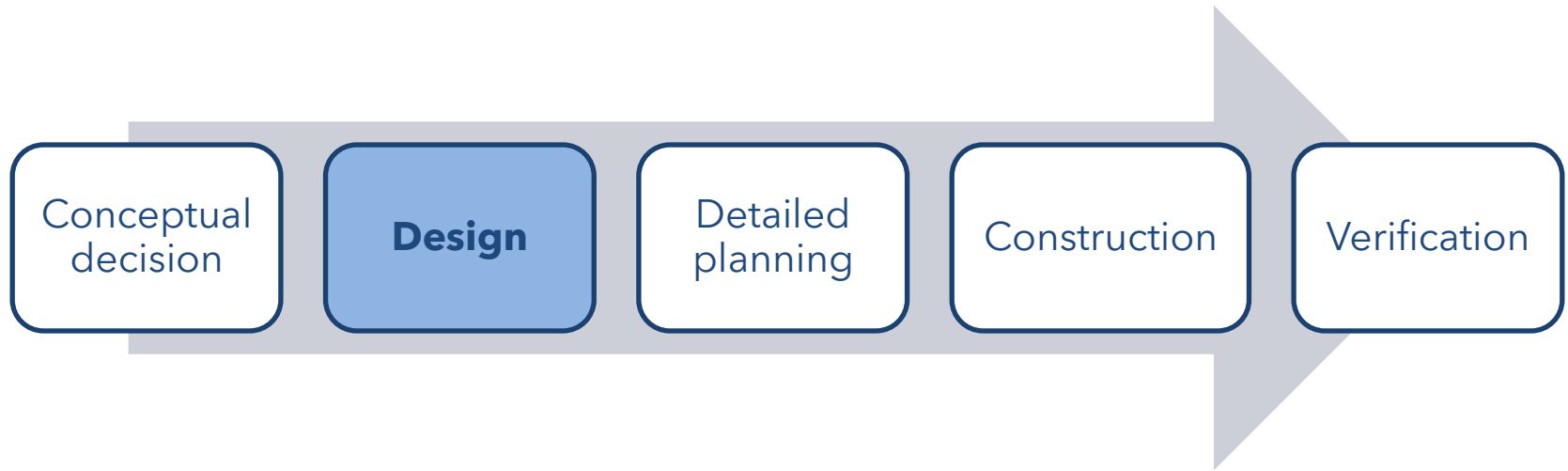


## **3.1. DESIGN PHASE**

# Tendering in construction process



# Design phase



# Market consultations

## Market consultations can help the municipality to:

- amend the procurement documents based on information received
- incorporate innovative solutions/approaches into the procurement process
- avoid a situation of non-realistic or outdated specifications,
- define the best contractual terms and conditions.



# Market consultations vs Market dialogue

**Important.** In contrast to market dialogue, **market consultation** is an integral part of the public procurement process, usually commenced by a Prior Information Notice.

It includes a description of the consultation process and announcement of the forthcoming public procurement exercise.

## MUNICIPALITIES

Can determine the state of current and future market capabilities and price structure in relation to their specifications and needs

## SERVICE PROVIDERS

Receive information about the expected requirements of contracting authorities which will be applied in the procurement process

# Procedure

If a municipality tends to apply **innovative solutions** for new construction, refurbishment or extension of a building:

- Use as many info channels as possible to share information publicly and widely
- Expand the pool of architectural, construction companies that have previously bid for or won similar contracts

**The municipality shall ensure that the same level of information is made available to all potential service providers and competition is not distorted by the participants involved in market consultations.**

**Important:**

There might be country specific requirements for market consultations.  
It is advisable to consult the relevant national authority.

# Market consultation steps

1. Research for consultation framing
2. Preparing the market consultation
3. Preparation and conducting interviews/ meetings
4. Using the results



## **Helps the municipality to:**

identify the best type of market consultations

broaden the group of actors to provide innovative solutions

communicate with many potential bidders

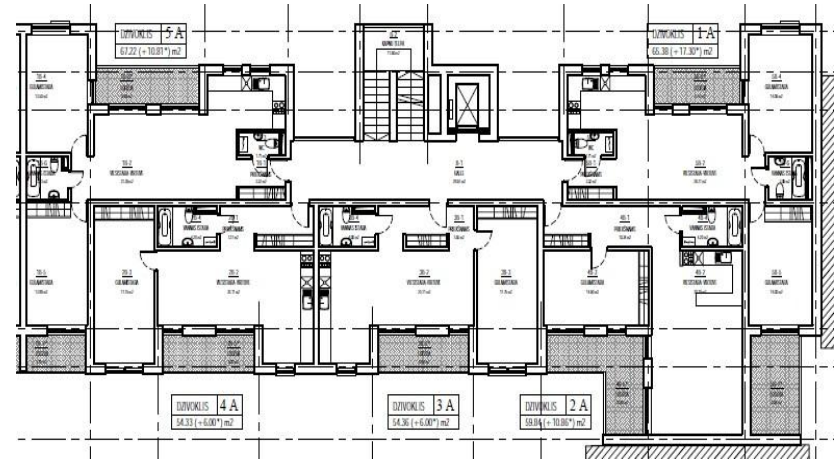
ensure equal information for all potential service providers.



# Procurement for elaboration of a design

**1<sup>st</sup> stage** - prequalification for selection of the architectural/ design firm

**2<sup>nd</sup> stage** - competition for submitting proposals for the design of the building according to the technical specification



# 1<sup>st</sup> stage - prequalification for selection

| Selection criteria   | Verification   |
|--|--|
| Building projects where circular economy principles have been applied along with the ability to use digital tools in this regard   | References related to contracts in the previous 5 years, supported by the CVs of the designers/ architects |
| The specification, procurement and installation of low environmental impact construction materials. To include reference to EPD in compliance with ISO 14025 or EN 15804                             |  |
| The use of holistic assessment tools in the design and specification of environmentally improved buildings including LCC and LCA. Comparative studies in compliance with ISO 14040/14044 or EN 15978 |  |
| Design, specification and monitoring to address daylighting and glare, thermal comfort and indoor air quality  |  |
| Assessment of building environmental performance using multi-criteria building assessment and certification schemes  |  |



# 3 pillar criteria in technical specification

| Pillars                | Requirements in technical specification/terms of reference  |
|------------------------|---|
| <b>Tox free</b>        | <ul style="list-style-type: none"><li>▪ requirements for materials for the building envelope, interior (e.g., using wood, eco-certified materials, low VOC emission construction materials)</li><li>▪ requirement for solutions to reduce the need of use of biocides</li><li>▪ eco-certification of a building</li></ul>   |
| <b>Circular</b>        | <ul style="list-style-type: none"><li>▪ recyclability, reusability, easy to repair materials, building elements</li><li>▪ easy separability of building elements in the event of demolition</li><li>▪ minimisation of new materials</li></ul>   |
| <b>Climate neutral</b> | <ul style="list-style-type: none"><li>▪ shape of the building - compactness and good use of daylight</li><li>▪ ensuring maximum solar gains, natural shading, cross ventilation</li><li>▪ insulation materials also preventing overheating in summer</li><li>▪ regionally/ locally produced materials</li><li>▪ avoidance of materials with high embodied energy</li><li>▪ air tightness of building (sealed envelope)</li><li>▪ primary energy consumption and the threshold for use of fossil fuels</li><li>▪ visual connectivity to the exterior landscape</li><li>▪ passive heating/ cooling options</li><li>▪ ventilation with heat recovery/ use of renewable sources</li><li>▪ places for parking bicycles and electric vehicles</li></ul> |



# Best practice: Tallinn – from conceptual design to preliminary design

## Climate friendly design

- **Energy class A** – strong focus on U-values, airtightness, and heat recovery.
- **Timber structures** – reduce CO2 emissions.
- **Adaptive design** – modular parts planned for future repurposing.
- **Passive cooling** – roof overhangs to reduce heat load.
- **Exploration of solar and rainwater use** – subject to heritage constraints.

## Toxic-free commitments

- **Interior & exterior finish materials** – selected to avoid hazardous substances.
- **Indoor air quality goals** – class II, with regulated VOC levels and air exchange.
- **Child-safe materials** – prioritised in all spaces.

## Circular solutions

- **Modular timber structures** – enabling disassembly, reuse, and recycling.
- **Material lifespan maximisation** – roof eaves extended for façade protection.
- **Natural landscaping** – use of mulch, gravel, and rubble in preference to synthetic materials.
- **Preservation** – foundation and surrounding trees are retained.

# Where to look further?

Step-by-step guide for the **process management** of toxfree, circular and climate-neutral construction at municipalities

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**Step-by-step guide for the process management of toxfree, circular and climate-neutral construction at municipalities**

**The NonHazCity guide for design & construction of tox-free, circular & climate friendly municipal buildings**

**Practical Guide**

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**The NHC guide for design & construction of tox-free, circular & climate friendly municipal buildings** presents practical insights from pilot projects conducted under the NonHazCity3 initiative



# Thank you!

Explore further:  
[NonHazCity 3 - Interreg Baltic Sea Region](#)



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