

# Webinar: Technical Focus

16th of December 21  
13:00 – 14:30 (CET)



## Objectives

**To explain core principles and terminology of the tender**

**To explain what is required in the Proposal: Challenge Brief TD2 + Reference Buildings**

**To explain expected outcome during the project (TD1 Section 2.1)**

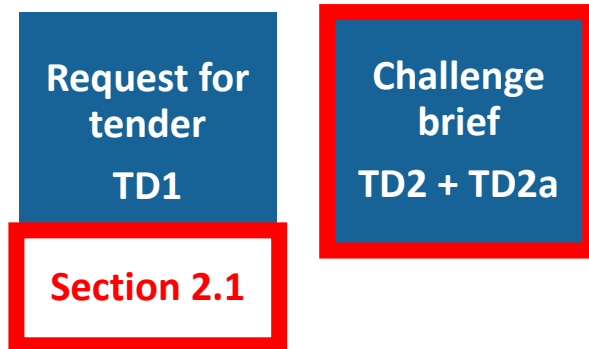
**To explain how TD2 and application Template TD6 are connected**

# Today's webinar focuses on TD2, TD6 and a section of the TD1

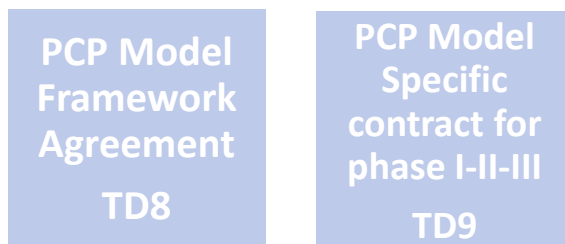
## Overview files

### PROCURE INPUT

#### Content related / CfT

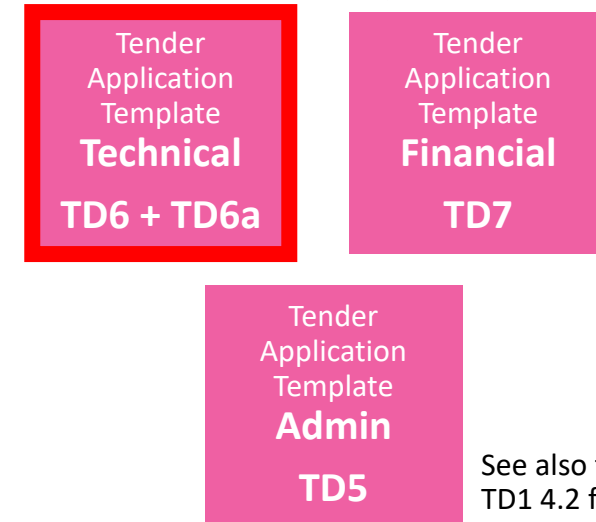


#### Reference only: Contract Templates

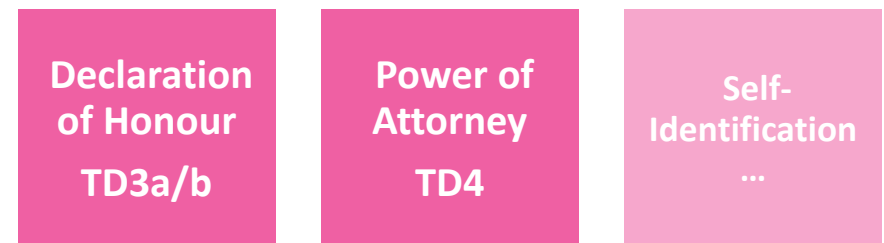


### YOUR SUBMISSION

#### Application Templates

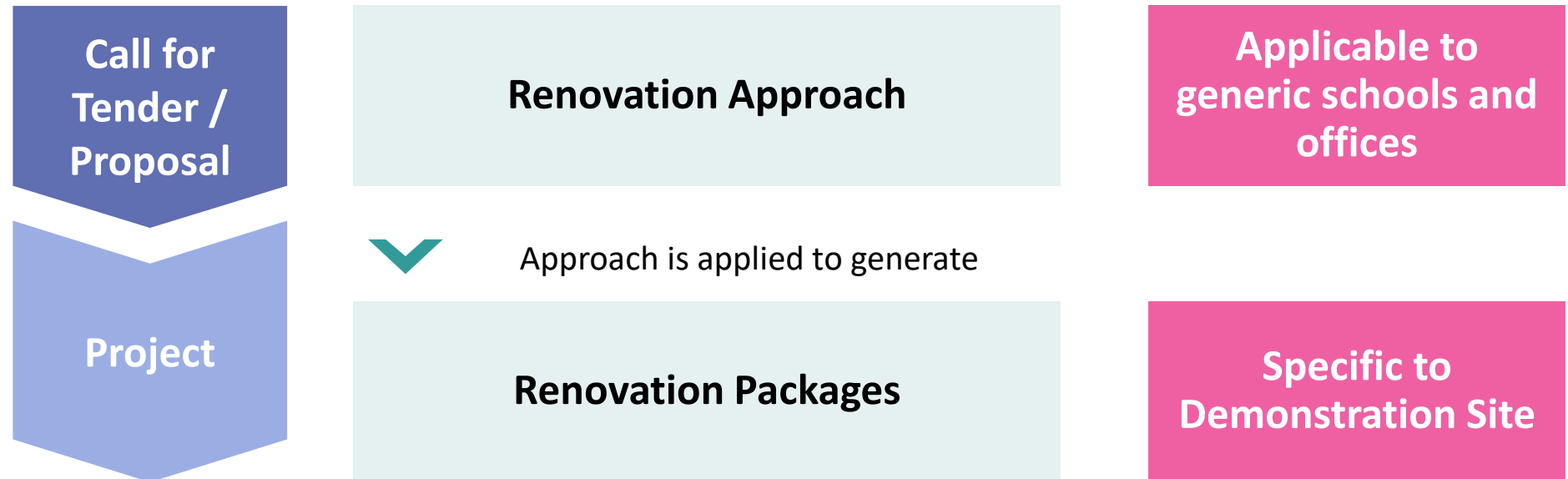


#### Administrative Forms



# Suppliers develop a generic Renovation Approach in the proposal ... .... to generate Renovation Packages during the project for Demonstration Sites

Core terminology



# procuRE is technology neutral

Solution design

**Buyers Group  
defines the  
problem and  
award criteria**

**Suppliers  
define the  
solution**

**...any constellation of technologies is thinkable if it is  
applicable to other buildings, sustainable, etc. ...**

# Challenge Brief

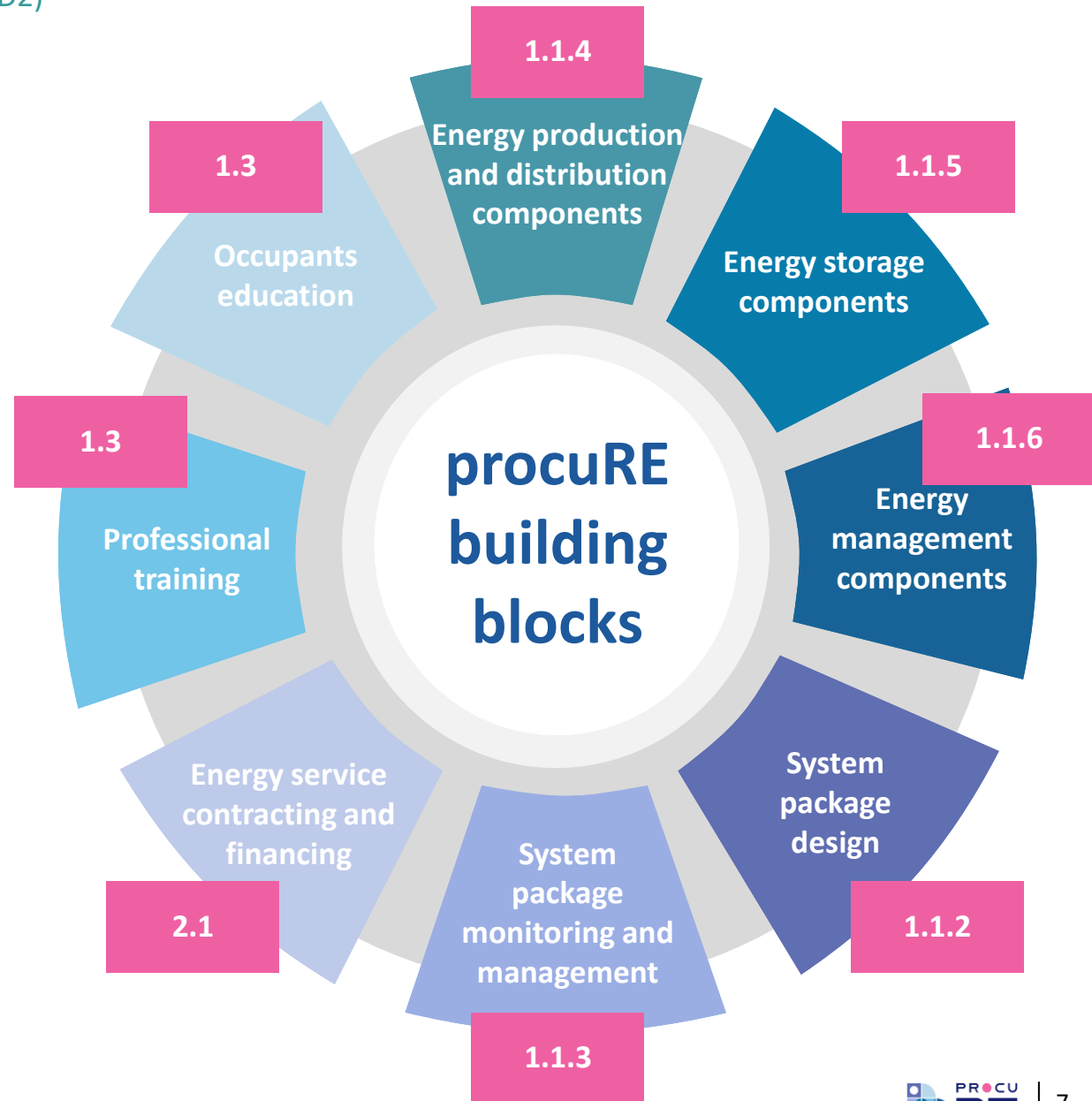
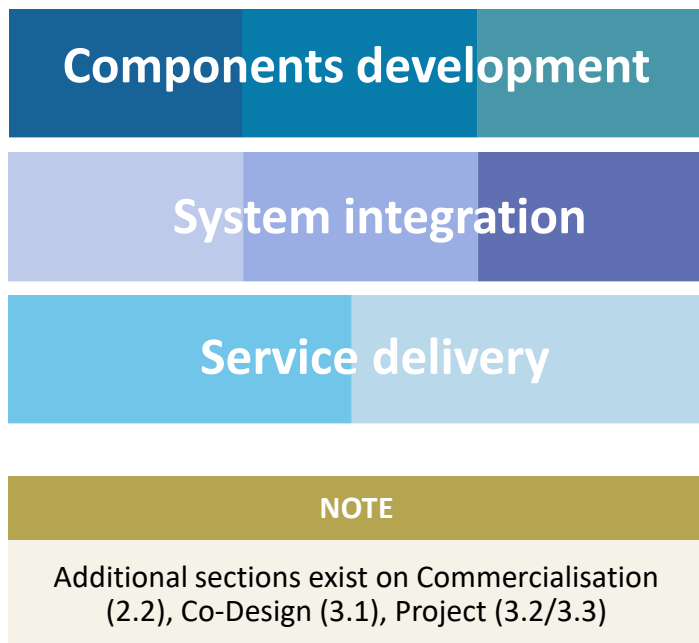
## TD2

# procuRE structures the common challenge for R&D services along eight building blocks

## Structure of Technical Content in Challenge Brief (TD2)

Our analysis identified eight blocks showing **major shortcomings** which require **progress beyond the state-of-the-art**.

An Expert Group will rate supplier proposals based on the Blocks' requirements.



# Suppliers deploy solutions in any three of six Demonstration Sites – Allocation takes place after Call-off in Phase 2

## Project: procuRE demonstration sites

### VELENJE, SLOVENIA

- ▶ Primary school + linked Sports hall
- ▶ Envelope 20 years old
- ▶ Space heating: oil + electric



### BARCELONA, SPAIN

- ▶ Offices + data centre
- ▶ 2010 upgrade to envelope (1850)
- ▶ Central heat pump with several splitters
- ▶ AC for data needs upgrade, monitoring installed since 2015



### NUREMBERG, GERMANY

- ▶ Primary school + nursery
- ▶ Built 2015 to passive-house standards
- ▶ Natural gas condensing boiler (radiators)
- ▶ No RES; basic HVAC control system



### ISTANBUL, TURKEY

- ▶ Office + bakery school
- ▶ Built 2015
- ▶ Variable Refrigerant Flow system
- ▶ No RES or monitoring



### VILA NOVA DE GAIA (PORTO), PORTUGAL

- ▶ Primary school + nursery
- ▶ Built 2014 to national standards
- ▶ Natural gas boiler, heat pump for cooling
- ▶ Small solar thermal; advanced control system for building



### EILAT, ISRAEL

- ▶ Future: Office + Maker + Exhibition
- ▶ Old terminal and tower - Built 1960
- ▶ Upgrades expected before phase III <sup>1</sup>
- ▶ Central HVAC, local AC systems, chillers



<sup>1</sup> Details of changes will be provided in tender specifications (Challenge Brief)

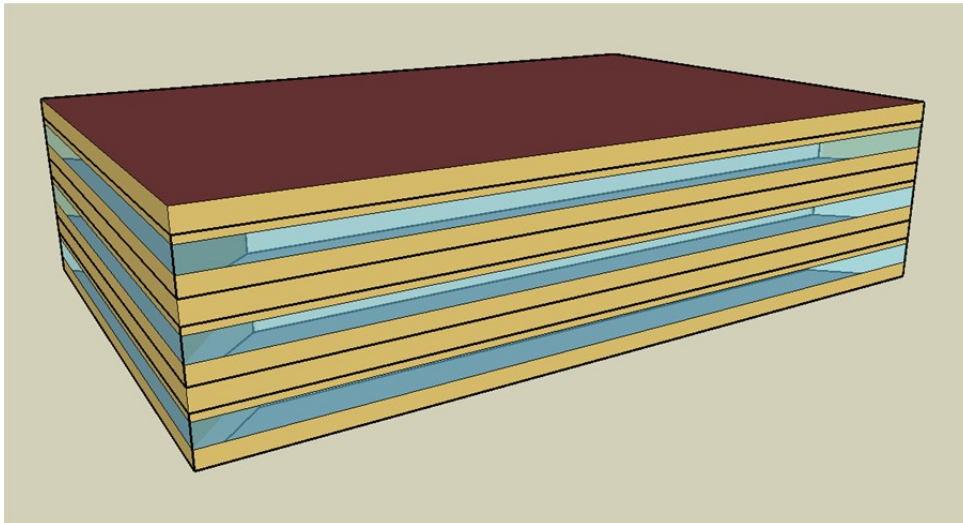


# For the call for tender phase, reference buildings are used to permit comparable calculations of designs

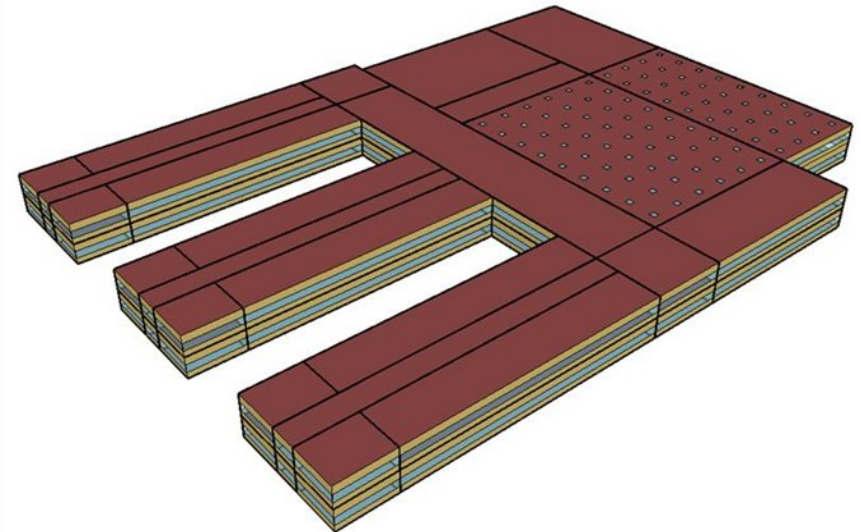
## Proposal: Reference Buildings

- ▶ **Reference Office and reference School**
- ▶ The description of the reference buildings and the boundary conditions to be considered are reported in the **RfT TD2a Challenge Brief, Annex E**
  - A significant share of information is machine readable requiring only minor adjustments

Reference Office



Reference School



# Reference Buildings

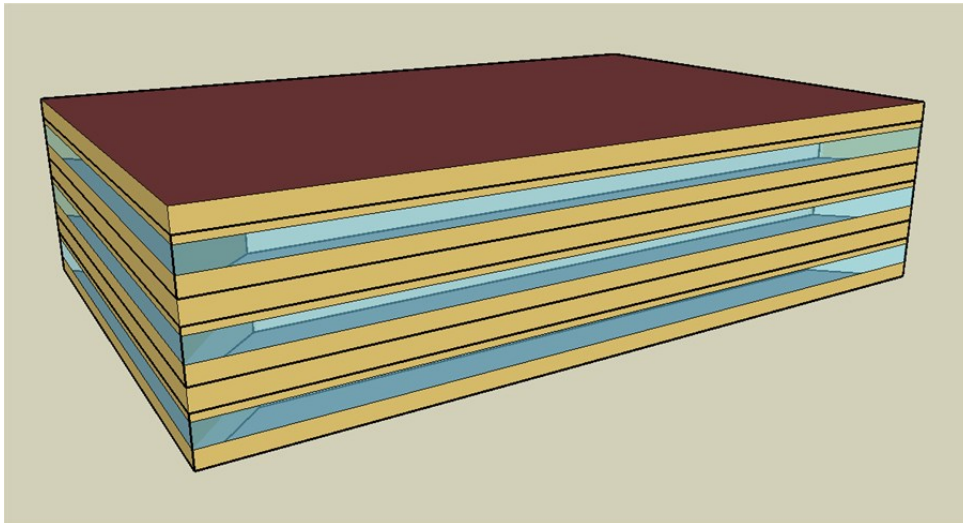
## TD2a

# For the proposal, reference buildings are used to permit comparable calculations of designs

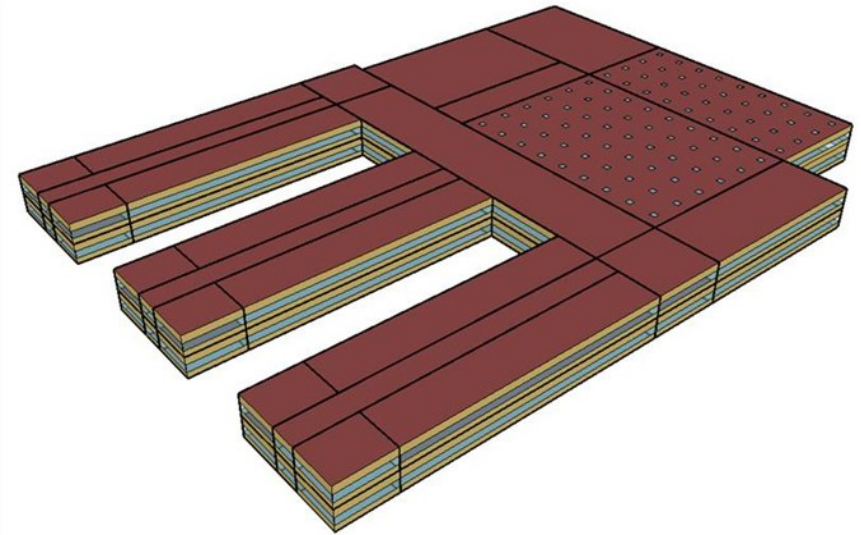
## Proposal: Reference Buildings

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Reference Office



Reference School



# For the proposal, reference buildings are used to permit comparable calculations of designs

## Proposal: Reference Buildings

### ▶ Reference Office and reference School, available material

- The material made available to clearly define the reference buildings characteristics and the boundary conditions to be considered consist of:
- For each reference building:
  - One .docx document containing the description of Reference building considered and how the available material is structured
  - One .xlsx file containing the Building model inputs
  - One .idf file containing building model inputs that can be used as a guide for the eventual development of the final .idf model.

### ▶ Climate Data

In addition to the material describing buildings' characteristics a folder containing climatic data<sup>1</sup> of the two considered locations (Nuremberg and Istanbul) for an entire average year is made available. This folder includes:

- One .docx document with a general analysis of main climatic data of the two reference locations
- For each reference location:
  - The hourly climatic data of the location in .epw and .tm2 format
  - One .csv file reporting only some climatic data (external air temperature, relative humidity, total horizontal radiation)

<sup>1</sup> Climatic data taken from meteonorm software: <https://meteonorm.com/en/>

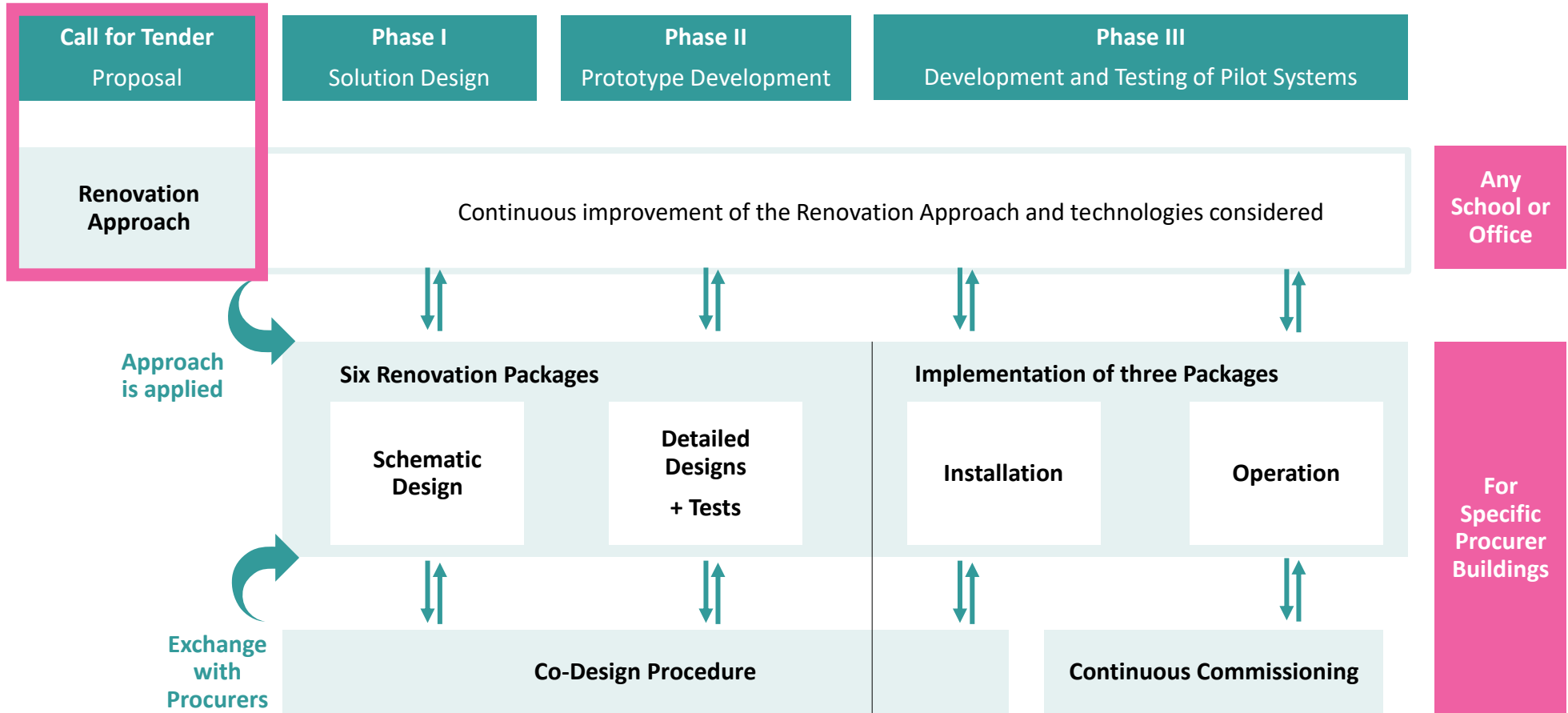
# Expected Outcome

## TD1 section 2.1

# During the project, the Renovation Approach is further developed and applied to Sites

See TD1 Section 2.1

Summary of core activities



# The Renovation Approach is consciously improved; funding and time increases with each phase

Summary procuRE conditions (TD1 section 2)

**TD1 Section 2.1**

| Process phase            | Results and activities expected                    | Buildings addressed by each supplier                         | Timeframe               | N. of contractors selected (min) | Financing to each contractor (max) |
|--------------------------|--|--|-------------------------|----------------------------------|------------------------------------|
| Call for Tender Proposal | Renovation Approach                                | 2 reference buildings in 2 climates                          | 3 Months (+ Evaluation) | Open                             | -                                  |
| Phase I                  | Continuous development through Co-Design Procedure | Schematic design of Renovation Packages                      | M1-M3 (3)               | 6                                | € 192,000                          |
| Phase II                 |  | Detailed design of Renovation Packages and small-scale tests | M4-M11 (8)              | 4                                | € 576,000                          |
| Phase III                |  | Installation and operation of Renovation Packages            | M12-M27 (16)            | 2                                | €2,112,000                         |
|                          | Continuous commissioning<br><b>Final Version</b>   |  |                         |                                  |                                    |

# Technical Application Template TD6 / TD6a



# Award Criteria, Challenge Brief and Application Template are fully aligned

## Structure of tender documents

| <b>(Weighted) Award Criteria</b><br>Request for tender<br>TD1  | <b>Challenge Brief</b><br>Challenge brief<br>TD2   | <b>Technical Application Template</b><br>Tender Application Template<br>Technical<br>TD6   |
|--|--|--|
| <b>Technical Criterion</b>   | <b>1 Technical Criterion</b>   | <b>1 Technical</b>   |
| T1 System Integration  | 1.1 T1 - System Integration  | 1.1 T1 - System Integration  |
| T2 Degree of achievement of objectives ...   | 1.2 T2 - Degree of achievement of ...  | 1.2 T2 - Degree of achievement of ...  |
| ...  | ...  | ...  |
| <b>Commercial Feasibility Criterion</b>  | <b>2 Commercial Feasibility Criterion</b>  | <b>2 Commercial Feasibility</b>  |
| <b>Project Management Criterion</b>  | <b>3 Project Management Criterion</b>  | <b>3 Project Management</b>  |
| <p><b>TD1 Section 3.4.2</b> includes:</p> <ul style="list-style-type: none"> <li>▶ Maximum points</li> <li>▶ Thresholds / Weights</li> <li>▶ Score scheme</li> <li>▶ Formulas</li> </ul> | <p><b>Challenge Brief TD2</b> includes:</p> <ul style="list-style-type: none"> <li>▶ Challenge description for each criterion</li> <li>▶ Aspects relevant for assessment</li> <li>▶ Annexes</li> </ul> | <p><b>Technical Application TD6</b> includes:</p> <ul style="list-style-type: none"> <li>▶ Pre-defined sections, sub-headings and some standardised tables</li> <li>▶ Notes on content expected</li> </ul> |





**Pre-commercial Procurement of  
Breakthrough Solutions for  
100% Renewable Energy Supply in Buildings**

**All tender information collected on  
[procure-pcp.eu/tender](https://procure-pcp.eu/tender)**

 [procure-pcp.eu](https://procure-pcp.eu)

 [bit.ly/procure-LI](https://bit.ly/procure-LI)

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[#procu100re](https://twitter.com/procure_pcp)



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