

14:00 | Round table 3

Improving building assessment through data integration



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TIMEPAC Vision

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Round table

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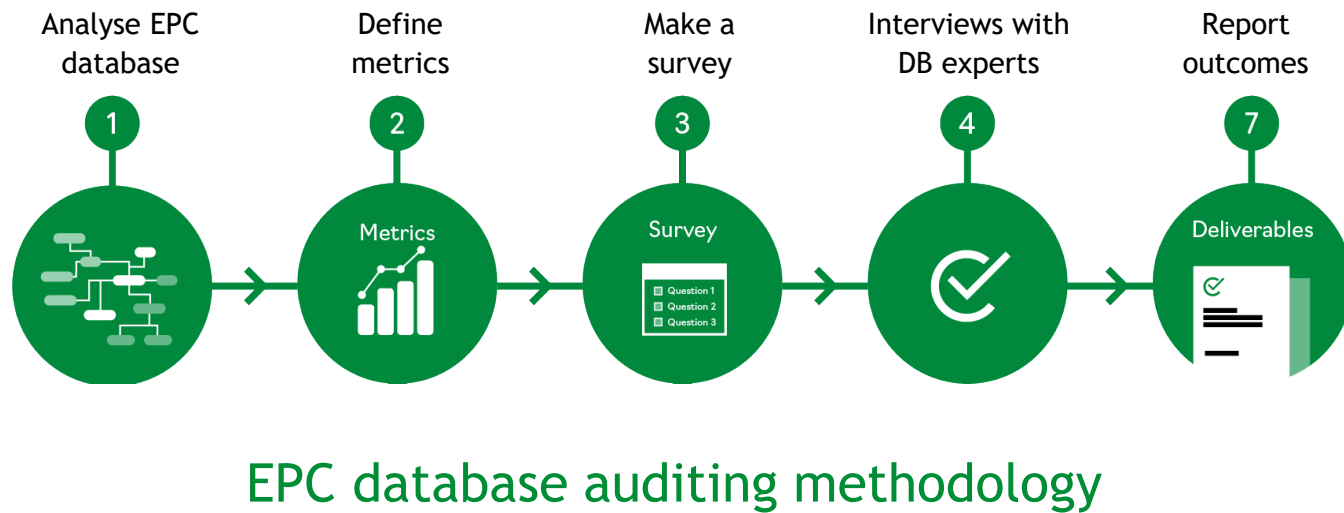
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**Are our EPC databases prepared
for the EPBD recast?**

EPC database auditing



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Comprehensive analysis of data storage in the participating countries

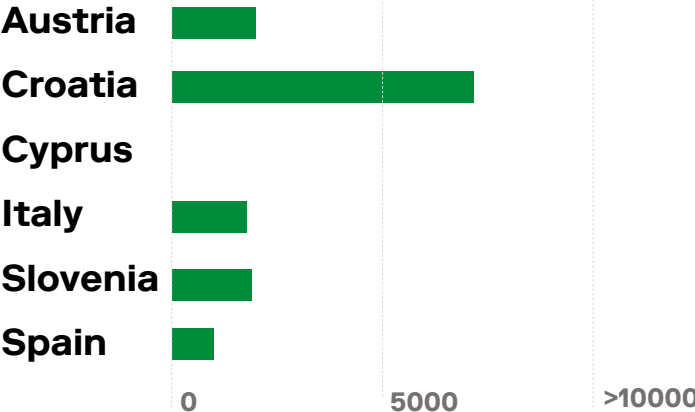
Deliverable 1.2

This deliverable summarizes the results obtained in Task 1.2 "EPC data storage" included in Work Package 1 (WP1) of the TIMEPAC project. The objective of WP1 is to carry out...

<https://timepac.eu/reports/comprehensive-analysis-of-data-storage-in-the-participating-countries/>

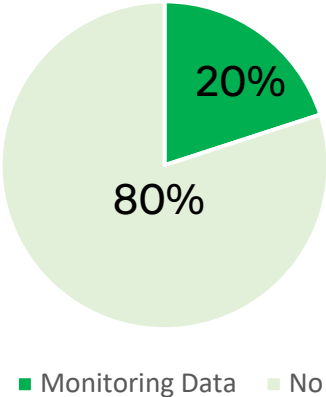
EPC database auditing

M6.1: Simplified database complexity index (SDCI)



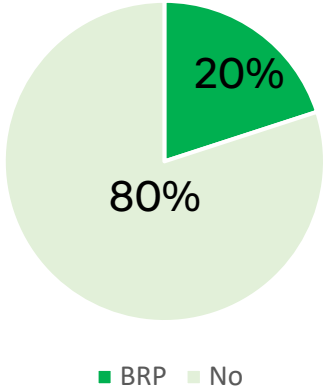
Most of pilots use a relational database management system (RDBMS) to store and handle their EPC data

M7.1: Store monitoring data



SDCI helps to measure the difficulty to adapt the EPC database to the EPBD recast (new indicators, instruments...)

M7.2: Store Renovation Passport data

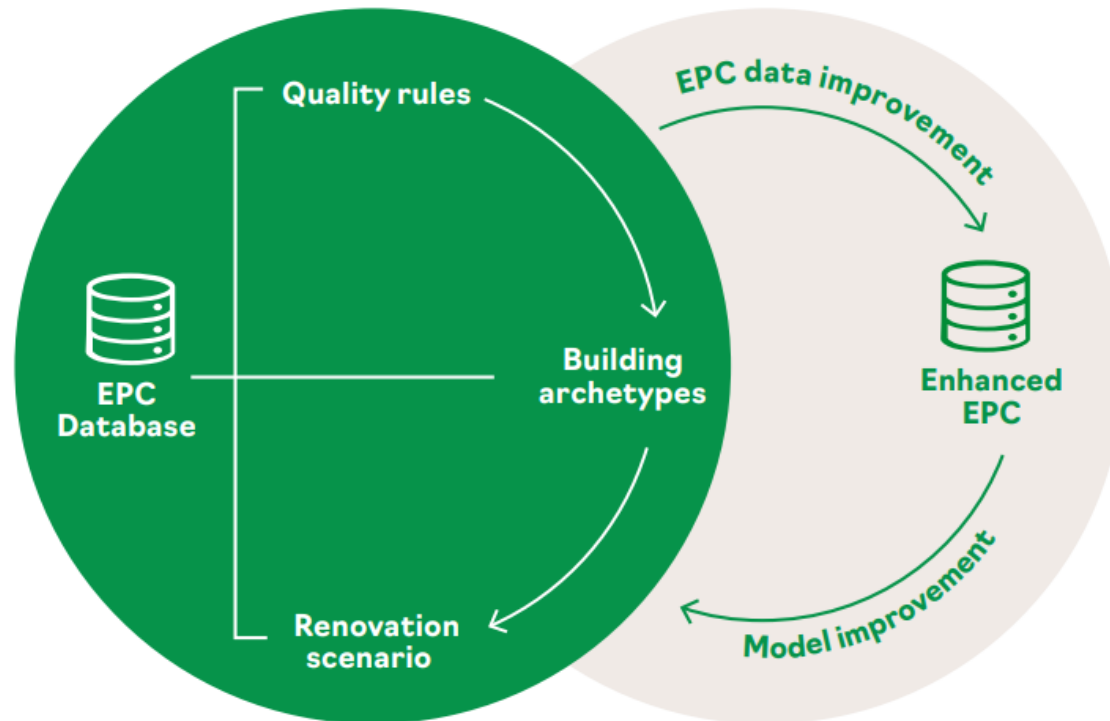


Few EPC databases are currently storing monitoring and renovation passports data

Examples of metrics

**How accurate is the data that is
stored in EPC databases?**

Quality assessment of EPC databases



Components of the data quality process

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Procedures and services to undertake large-scale statistical analysis of EPCs databases

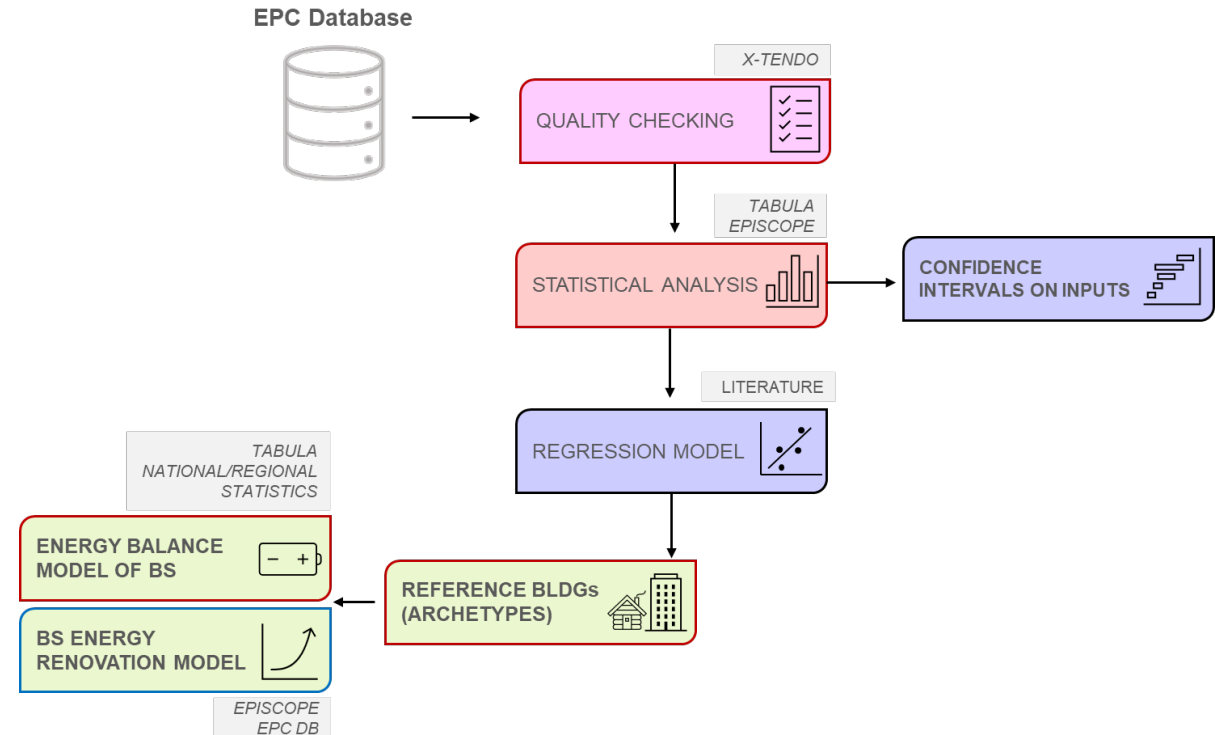
Deliverable 2.5

This report summarizes to the work performed in Task 2.5 "TDS 5 - Large scale statistical analysis of EPC databases" of Work Package 2 "Transversal Deployment Scenarios". This work package...

<https://timepac.eu/reports/procedures-and-services-to-undertake-large-scale-statistical-analysis-of-epcs-databases/>

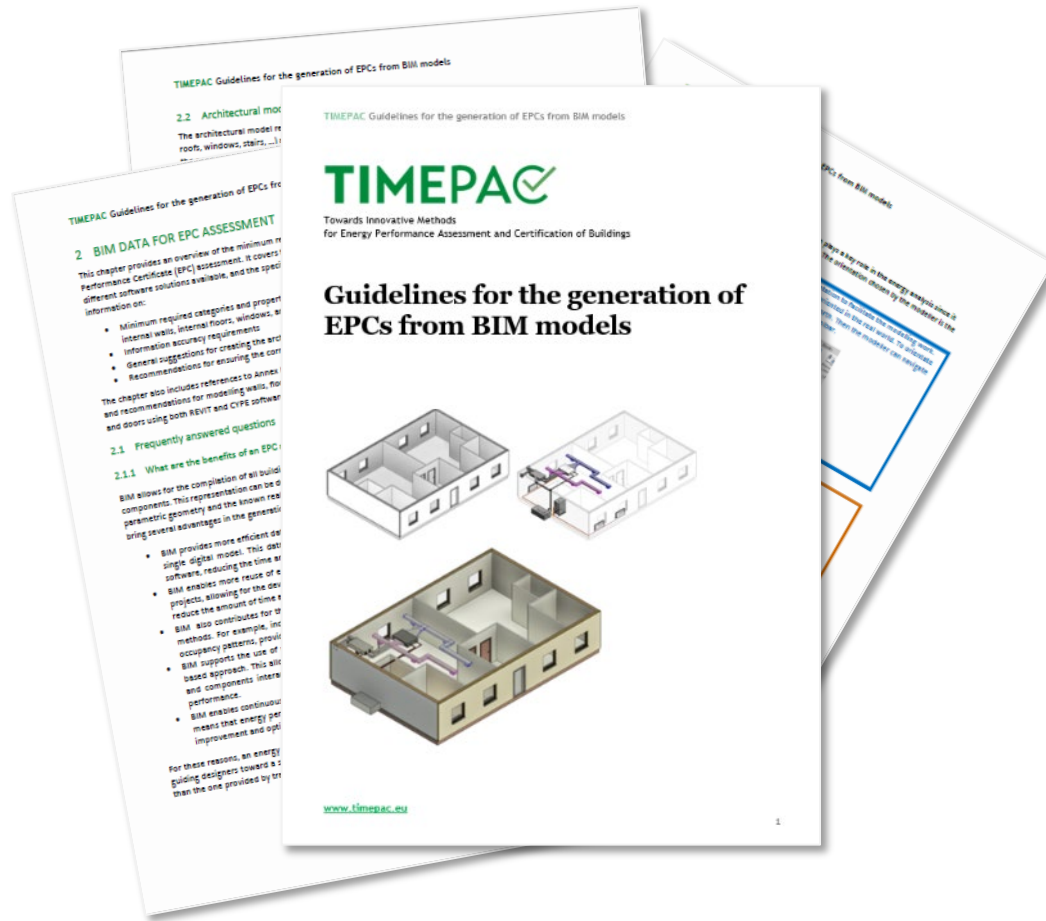
Quality assessment of EPC databases

1. Defining standardised rules to verify the EPC quality and creating archetypes
2. Setting up controls on EPC input data to increase reliability in the future
3. Using EPCs for benchmarking, planning, and assessing the improvement of the building stock energy performance



Can the use of BIM for generating EPCs improve data quality?

BIM for improving EPC



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Generating enhanced EPCs with BIM data

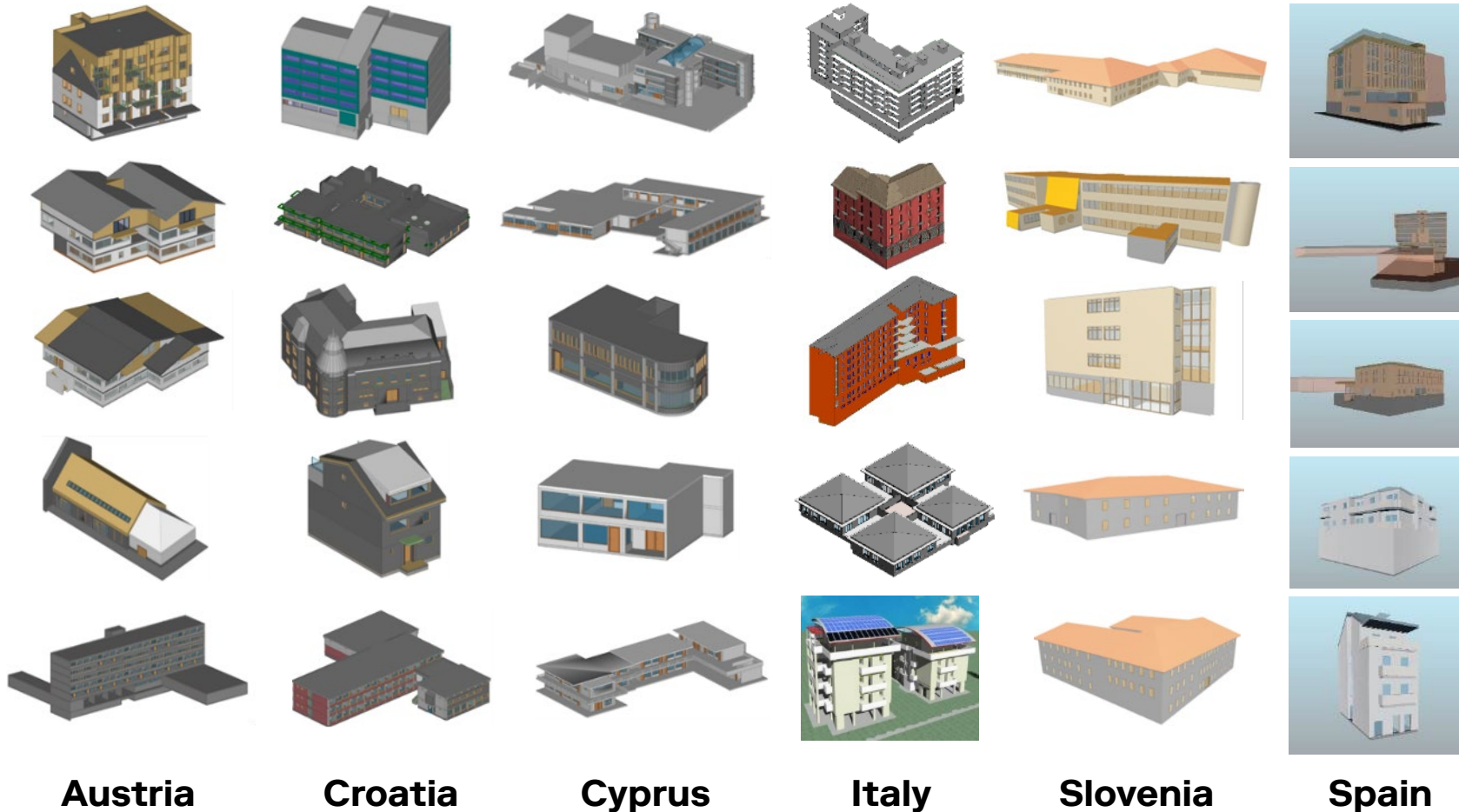
Deliverable 2.1

This report summarizes the work of Task 2.1 "TDS 1- Generating enhanced EPCs with BIM data", one of the five scenarios carried out in Work package 2 "Transversal Deployment Scenarios"...

<https://timepac.eu/reports/generating-enhanced-epcs-with-bim-data/>

Guidelines for the generation of EPCs from BIM

BIM for improving EPC



Cases

- 30 buildings in 6 countries
- BIM from scratch
- BIM model validation

Uses

- Residential
- Tertiary

Input data

- Floor plans
- EPCs
- BIMs

Time

- BIM: ~ 8 hours
- No BIM: ~ 12 hours

Application cases and reliability study

Round table 3: Questions

- How can BIM improve Energy Performance Certification (EPC), Renovation Passports (RP), and Digital Building Logbooks (DBL)?
- What are the primary barriers to adopting BIM for improving EPC, RP, and DBL, and how can these barriers be overcome?
- What are the main challenges in data integration among BIM, EPC, RP, and DBL?
- What is the long-term potential of integrated building data in supporting sustainable and energy-efficient building practices?