

Session 6

Making use of renovation roadmaps: from the building to the building stock exploiting the renovation passport data

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Overview of presentation

- The link between national building renovation plan and renovation passport
- Potential of the renovation passport to improve data on existing buildings and renovation measures
- Why is this important? It's not just about energy planning, but also about reporting on target achievement

Transformation of the building stock and existing buildings

National Building Renovation Plan (NBRP) (Article 3)

- ... a roadmap with nationally established targets and measurable progress indicators to ensure a highly energy efficient and decarbonised national building stock and the transformation of existing buildings into zeroemission buildings by 2050
- Annex II Template for the National Building Renovation Plans

Renovation Passport (Article 12)

- 'renovation passport' means a tailored roadmap for the deep renovation of a specific building in a maximum number of steps that will significantly improve its energy performance;
- 'deep renovation' means a renovation which is in line with the 'energy efficiency first' principle, which focuses on essential building elements and which transforms a building or building unit:
 - (a) before 1 January 2030, into a nearly zero-energy building;
 - (b) from 1 January 2030, into a zero-emission building;

Reference: https://www.europarl.europa.eu/doceo/document/TA-9-2024-0129_EN.html (12 March 2024)



Possible links between the national building renovation plan and the renovation passport

Content of NBRP according to Annex II

- (a) Overview of the national building stock
- (b) Roadmap for 2030, 2040, 2050
- (c) Overview of implemented and planned policies and measures (PaMs)
- (d) Outline of the investment needs, the budgetary sources and the administrative resources

Possible link with renovation passport

Annual renovation rates: number and total floor area (m²), per building type, to nearly zero-energy and/or to zero-emission building levels, per renovation depth (weighted average renovation), public buildings

<u>Targets</u>, e.g. for annual renovation rates; targets for expected greenhouse gas emission reduction (%)

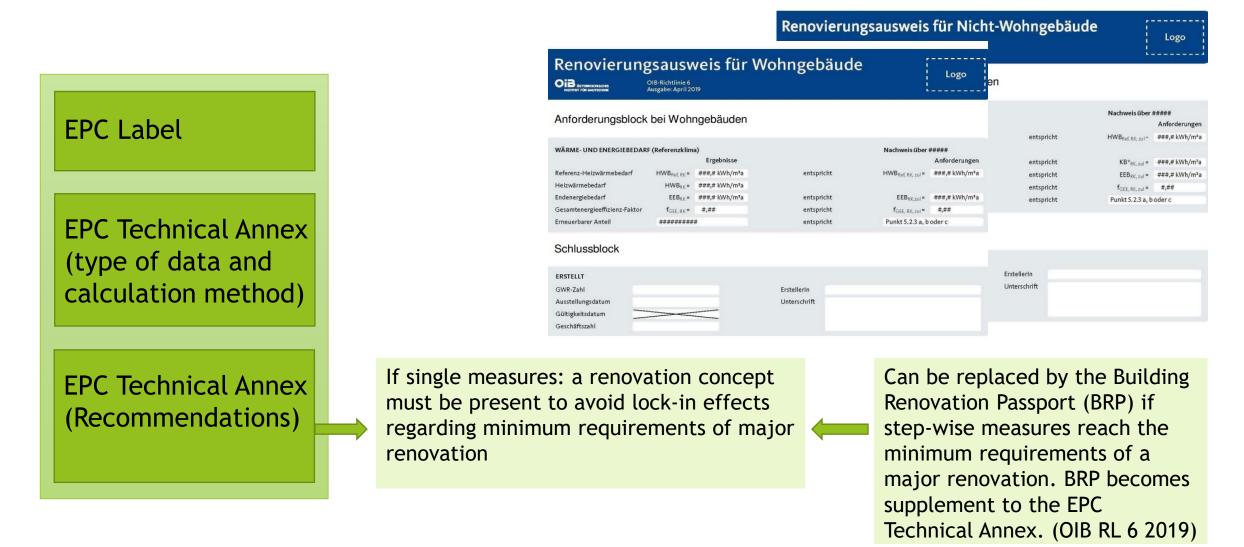
<u>passport scheme</u>: the promotion of deep renovation of buildings, including staged deep renovation; the creation of one-stop-shops or similar mechanisms for the provision of technical, administrative and financial advice and assistance, and other PaMs

Total <u>investment needs</u> for 2030, 2040, 2050 (million EUR); public investment; private investment

Potential of the renovation passport to improve data on existing buildings and renovation measures

EPC and Renovation Passport: Recommendations

(example: transposition of amending Directive (EU) 2018/844 in Austria)



Renovation roadmaps produced for case study buildings in TIMEPAC - what is the right level of detail?

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TIMEPAC Code	Exemplary renovation roadmap: measures in the correct sequence (final result depends on maintenance and repair plan of facility management)
AT-09	Building level:
	(1) Package of measures:
	Renovation and insulation of roof (measure 1) Installation of PV system on the roof (measure 2)
	(2) Package of measures:
	North and south façade: Prefabricated Curtain wall, e.g. "GAP façade" including windows and mechanical ventilation with heat recovery (measure 3)
	West and east façade: GAP façade with integrated PV panels in the upper third of the façade (measure 4)
	(3) Package of measures (measures 5-8):
	Reduction of water supply and return temperature of the heating system
	Low-temperature heat delivery system (panel heating)
	Individual room control with optimisation function Separation of space heating and domestic hot water production
	separation of space fleating and domestic not water production

Timing of measures to avoid possible lock-in effects; considering interactions

All measures of Package (1) and Package (2) are implemented prior to Package (3).

The Renovation Roadmap must be immediately agreed with the owners to stop individual replacement of windows.

Insulation measures must be checked regarding fire safety requirements.

When planning the individual measures, the following interactions with other measures must be considered:

Insulation of the façade requires a watertight connection to the flat roof.

The renovation of the flat roof must take into account the installation of a PV system. It must be checked whether the statics of the building are suitable for the additional load.

The PV system is installed after the renovation of the flat roof.

The roadmap is not a renovation plan.

The sequence is done by the EPC/RP issuer.

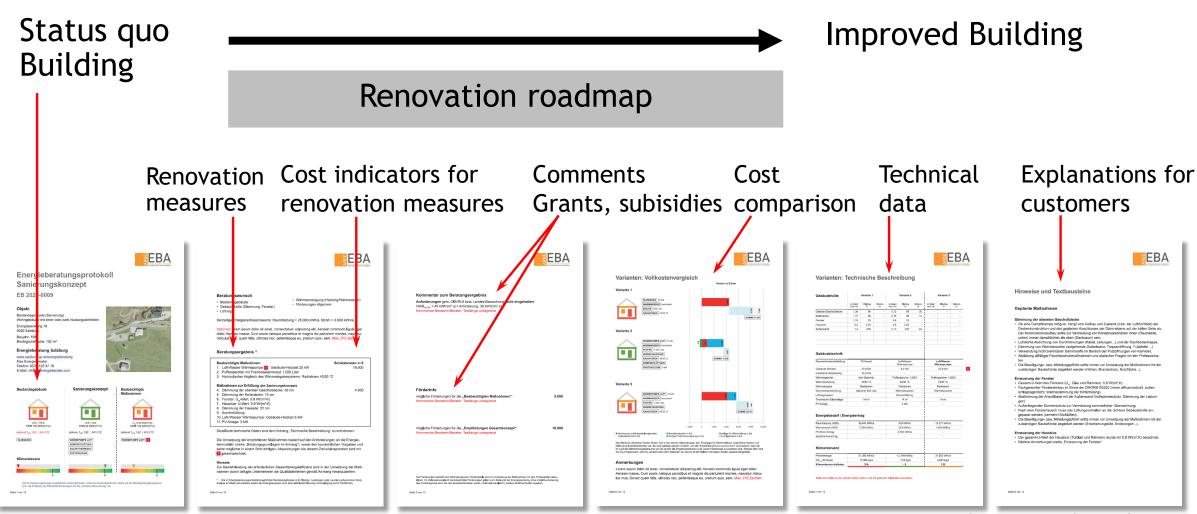
Interactions are included in the software tool and are activated when a measure is selected; to be considered in the renovation plan.

The roadmap is uploaded to the EPC database and made accessible to the facility manager of the building to consider it for future planning.

District level:

Decarbonisation of district heating

Roadmap tool in Austrian EPC software



Tools: Ecotech and ETU

Example | Renovation passport in the province Salzburg, Austria | The path towards Nearly Zero Energy Building

Essentially, the recommendations in the EPC are replaced by the specific renovation passport. The implementation of a measure is linked to the updating of the EPC and to the updating of the renovation passport. Thus, by means of comparisons, the measures and the indicators can be tracked.

EPC existing buildings

EPC renovation roadmap

EPC renovation EPC renovation EPC existing plan

Automatic check: Is the renovation roadmap available? Will requirements be achieved?

completion

Measures of renovation roadmap partly implemented

Tracking the implementation of renovation measures with the EPC database

building

EPC renovation roadmap

Those measures implemented are not included any longer

plan

EPC renovation ——— EPC renovation ——— EPC existing completion Measures of renovation roadmap

partly implemented

building

Why is this important? It's not just about energy planning, but also about reporting on target achievement

Link with National Energy and Climate Plan according to EU Governance Regulation

Recital (41)

The national building renovation plans should be closely linked with the integrated national energy and climate plans under Regulation (EU) 2018/1999, and progress in achieving the national targets and the contribution of the national building renovation plans to national and Union targets should be reported as part of the biennial reporting under Regulation (EU) 2018/1999.

Conclusions

The renovation passport scheme should be designed

- to be effective at building level and
- to deliver useful information for the national building renovation plan.

The better the information about existing buildings and renovation measures, the easier it is to plan, evaluate and adapt policies and measures.





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Thanks for your attention!

