

National Building Renovation Plans Webinar



NATIONAL BUILDINGS RENOVATION PLANS

From planning to implementation and delivery: an analysis of National Building Renovation Plans with case studies

SEPTEMBER 22 | 10.00 – 11.30 | WEBINAR



Microsoft Teams



National Building Renovation Plans Webinar

AGENDA

Introduction

Rémi Collombet, Secretary General, Efficient Buildings Europe

European Commission's Assessment of the First Draft of NBRPs

Julien Tami, Policy Officer, DG ENER, European Commission

"The Delivery Challenge of NBRPs" Study

Quentin Jossen, CLIMACT

Q&A

From Concept to Practice: National Building Renovation Plans Case Studies

- **The Danish National Building Renovation Plan**
David Herrmann, Head of Unit, Energy Efficiency and Data, Danish Energy Agency
Nina Helene Hilbard, Teamlead, Energy Efficiency and Data, Danish Energy Agency
- **The Spanish National Building Renovation Plan**
Ainhua Díez de Pablo, Head of Building Innovation and Sustainability Unit, Spanish Ministry for Housing and Urban Agenda
- **The Portuguese National Building Renovation Plan**
João Simões, Technical Specialist and Team Leader, ADENE - Agência para a Energia

Q&A and Conclusions

European Commission's Assessment of the First Draft of NBRPs



Julien Tami

European Commission

Policy Officer at DG ENER



RENOVATE EUROPE



Draft national building renovation plans: European Commission assessment and feedback

Julien TAMI

Renovate Europe Webinar

22 September 2026

NBRP – Submission and assessment

- 2-stage submission:
 - **1st Draft plan** due by **31 December 2025**
 - Assessment & feedback from the Commission – supported by the JRC – **deadline 6 months after submission**
 - **Final version** of the plan due by **31 December 2026**



NBRP State of play

- **19 complete** draft NBRPs submitted : ES, BE-Wallonia, HR, BG, FI, RO, DE, PT, LT, SI, DK, CY, AT, NL, FR, SE, *EL, EE, LV*.

Published on the [NBRP webpage](#) (except LV)

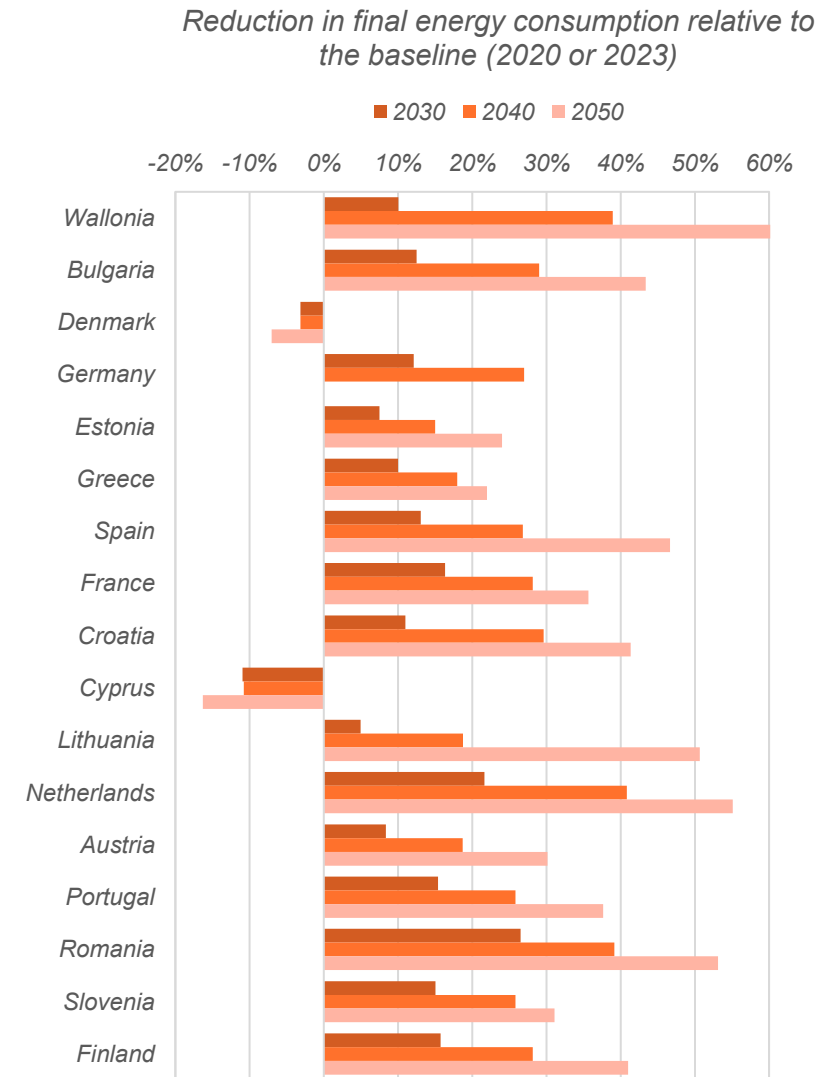
- **10 pending** draft NBRPs : BE-BCR and -FLA, CZ, HU, IE, IT, LU, MT, PL, SK.
- On 14 July, [publication](#) of the assessment for the **16 first draft** in the form of :
 - Short concrete and tailored-made [feedback](#) for every country
 - A more elaborated [assessment report](#)
- To come : assessment of EL, EE and LV



Roadmap

Final energy use in buildings

- Final energy consumption targets provided in **17 of 18 draft plans assessed**
- By **2030**: most reductions range from **10% to 20%**
- By **2050**: most reductions range from **30% to 50%**
- **Buildings become more energy efficient despite increasing floor area and activity levels**
- Two countries project **increases** in total final energy consumption, however the consumption per m² of floor area is decreasing



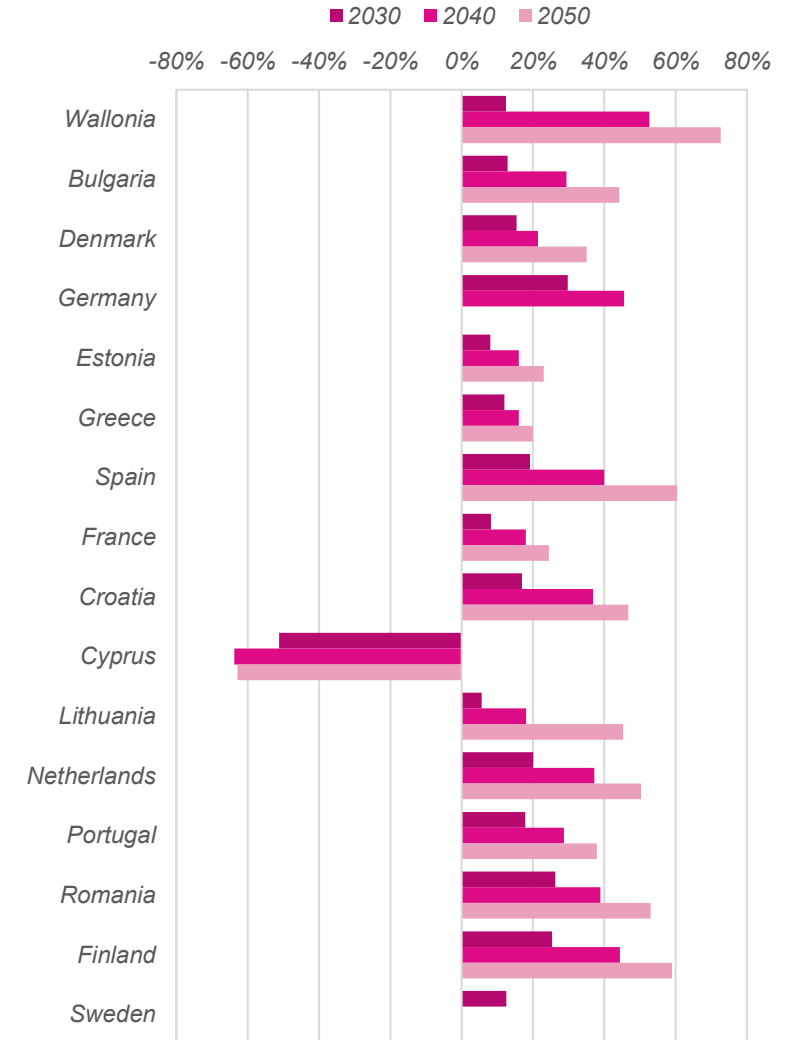
Sweden does not provide targets for final energy consumption.
Bulgaria's targets for 2040 and 2050 cover only non-residential buildings.
Portugal's targets cover only residential buildings.
Germany does not provide the 2050 target.

Roadmap

Primary energy use in buildings

- Primary energy consumption targets provided in **16 of 18 draft plans assessed**
- By **2030**: most reductions range from **10% to 30%**
- By **2050**: most reductions range from **30% to 50%**
- In **six draft plans**, primary energy decreases faster than final energy, reflecting **renewables deployment, fuel switching and evolving primary energy factors**
- Several countries apply **constant primary energy factors**, potentially **underestimating future primary energy reduction**

Reduction in primary energy consumption
relative to baseline (2020 or 2023)



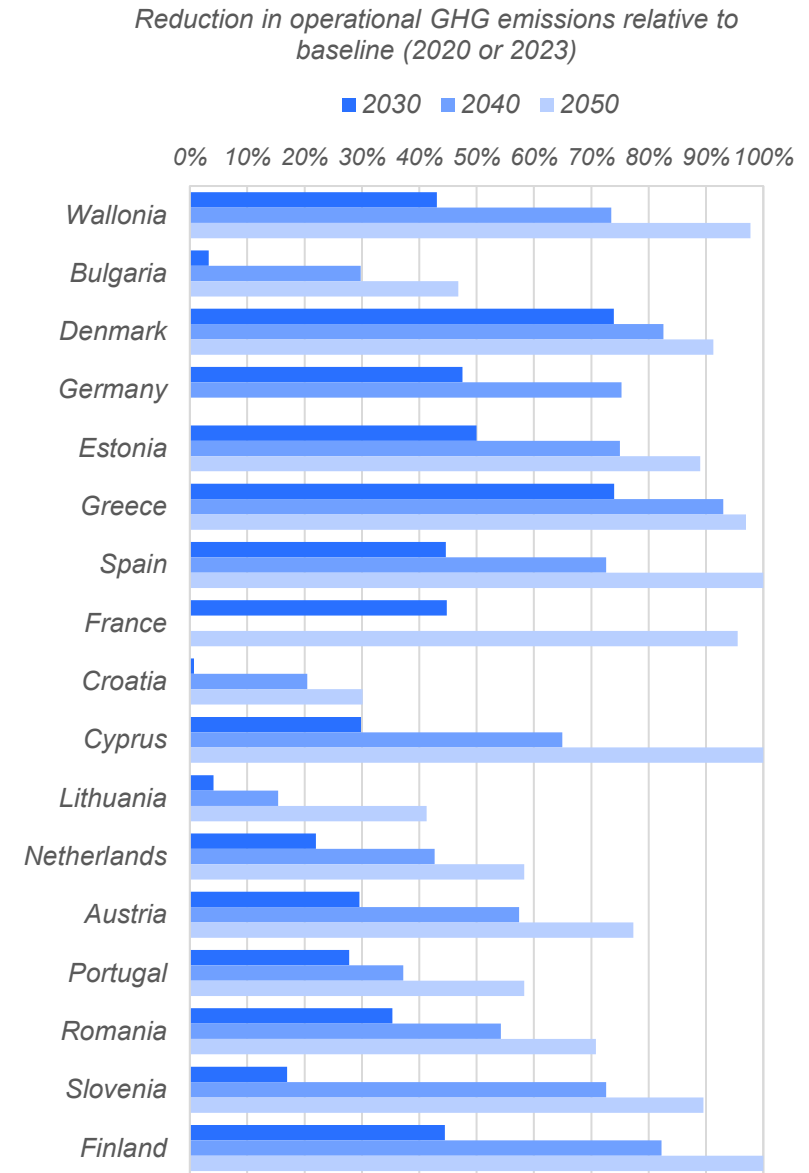
*Austria and Slovenia do not provide targets for primary energy consumption.
Bulgaria's targets for 2040 and 2050 cover only non-residential buildings.
Greece and Portugal's targets cover only residential buildings.
Sweden provides only the 2030 targets.
Germany does not provide the 2050 target.*



Roadmap

GHG emissions in buildings

- Operational GHG emission targets provided in **17 of 18 draft plans assessed**
- By **2030**: reductions range from **20% to 50%**
- **Almost half of the draft plans target GHG emission reductions above 90% by 2050**
- Wide variation reflects differences in **scope, building coverage, emission factors and ambition**



Sweden does not provide targets for operational GHG emissions.
Bulgaria's targets for 2040 and 2050 cover only non-residential buildings.
Greece and Portugal's targets cover only residential buildings.
Germany does not provide the 2050 target.
France does not provide the 2040 target.

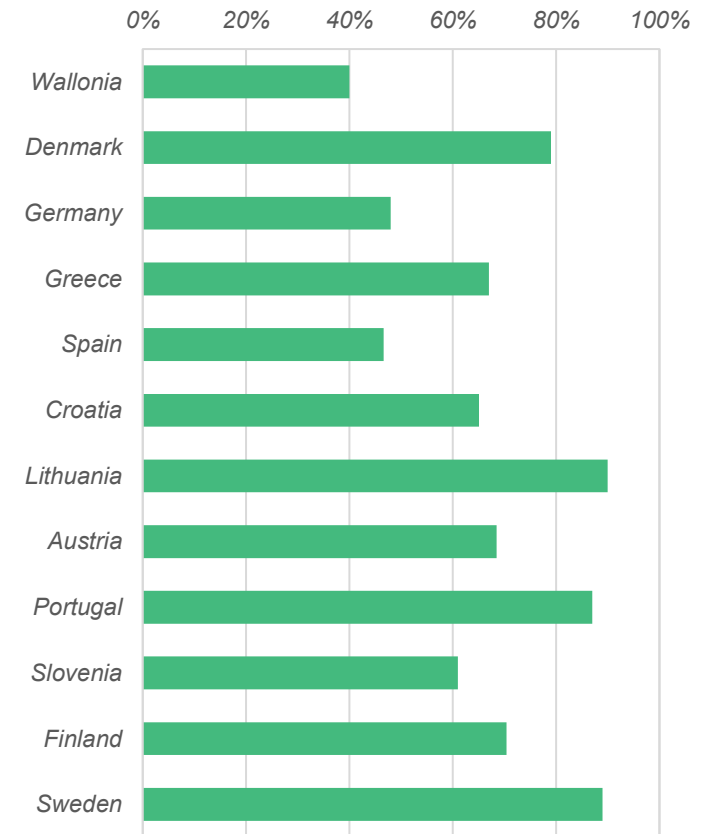


Roadmap

Renewable energy in buildings

- Targets for renewable energy in buildings' final energy consumption in 2030 is provided in **12 of 18 draft plans assessed**
- **By 2030: renewable energy shares range from 40% to 90% of buildings' final energy consumption**
- Most draft plans also include targets for the deployment of **solar technologies**, particularly **PV and solar thermal**

Share of renewable energy in buildings' final energy consumption by 2030



Bulgaria, Estonia, France, Netherlands and Romania do not provide targets for the share of renewable energy in buildings' final energy consumption.

Cyprus provides several values, making the target unclear.

Investment needs and funding

Investment needs

- Identified by **16 draft plans**, at least partially (i.e. only by 2030)
- However, most lack a clear calculation methodology and input data
- **Investment needs in €/m²** (JRC calc.)
 - **Below 200 €/m²**: BG, CY, DK, ES
 - **200 - 500 €/m²** : Wa, FI, FR, LT, RO, SI
 - **Above 500 €/m²** : DE, EE, HR, AT
- *This calculation identified the need for further verification of data in certain cases!*

Funding sources

- Identified in **12 draft plans**, at least partially
- **Public funding** contribution is 10%-60% (20-30% most common)
- **Gap** between investment needs and funding sources
 - **No gap**: CY, DE, DK, EE, ES, LT, NL, RO
 - **Not clear**: AT, EL, HR
 - **Gap**: SI

Key findings

- The 18 assessed draft plans are **mostly complete** despite a few gaps
- **Improved completeness and greater homogeneity** compared with the **LTRS**, with good consistency across other reporting exercises (NECPs, NECPRs and national cost-optimal reports)
- A solid understanding of the building stock and energy performance baseline, and **encouraging levels of ambition**:
 - **Primary energy** consumption **reductions of 20% to 73% by 2050**
 - Commitment to **decarbonisation**, with around half draft plans targeting GHG emission **reductions above 90% by 2050**
 - **Renewable energy deployment**, with 2030 shares ranging from **40% to 90%** in the draft plans providing targets
 - Comprehensive packages of policies and measures, covering **broad range of policy areas**
 - **Investment needs** identified in 16 draft plans, ranging from 200 € to more than 500 €/m²

Feedback from the EC

In view of the submission of the final version of the plan by 31 December 2026:

- **Complete missing indicators**/targets/funding
- Ensure an appropriate level of **ambition** to reach an EE and decarbonised building stock
- Provide a credible and effective roadmap towards the **decarbonisation of heating** with a view to the **phase out of boilers** powered by **fossil fuels**
- Ensure that **energy poverty is** adequately addressed
- **Quantify** the **impacts** of policies and measures in energy savings/GHG emissions
- Demonstrate the **inclusiveness of the public consultation**
- Clarify **inconsistency**, plausibility between renovation targets, greening of the grid and reduction in energy consumption / GHG emissions



Next steps and key messages

- Continuous engagement with Member States to 1) ensure the submission of a draft and 2) prepare the submission of a comprehensive final plan
- Encourage stakeholders to use this information to engage with authorities at national levels
- After planning → time to delivery and implementation !

Thank you



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“The Delivery Challenge of NBRPs” Study



Quentin Jossen
CLIMACT





Empowering **you** to act
on **climate change**

Are the NBRPs designed to deliver?

An assessment of fifteen draft plans against a common grid

Quentin Jossen | CLIMACT | 22 September 2026

Three rounds of strategies, one different question

2014, 2017, 2020

Three rounds of long-term renovation strategies. Each round improved how objectives were written. The renovation rate is still around 1% a year.

2026

The first National Building Renovation Plans. A shift towards real-life results?

Our question

**Not whether the ambition is right.
Whether this one will deliver, and
what would make it deliver.**

15 plans · 19 topics · 8 dimensions · one common grid · for a coalition of eleven industry and civil-society organisations

Ambition is not what is missing

No plan of the fifteen reaches the delivery-ready threshold overall. Across the 2,280 assessments, **52%** of assessed provisions reach it — **79%** on explicitness, **36%** on evaluability and on social robustness.



What the plans do not translate, fund, or organise

Do not translate

Targets are quantified. What comes next is rarely stated: how much renovation activity, at what depth, in which building segments, for which households.

Regulatory trajectories and thresholds often remain announced rather than enacted.

Do not fund

Most plans now put a figure on what renovation will cost. Fewer say where the money comes from.

And declared maturity is often not budgeted maturity: well-designed delivery architectures carrying no budget and no start date.

Do not organise

Delivery capacity is rarely sized against the task, and almost never budgeted separately from the works.

The plans diverge widely on who is meant to deliver, and devolve without funding the capacity to receive.

Seven recurring gaps, grouped in three. The full list is in the report.

No plan holds it all. Every piece is working somewhere.

Designing the system

How instruments work with one another and cover the range of needs

Spain · Slovenia · Belgium-Wallonia · Romania
each in a different sense

Translating targets into activity

Rates, depth, building segments, household profiles

Slovenia · Romania · Spain · Portugal

Anchoring the means

An amount, a legal basis, a date

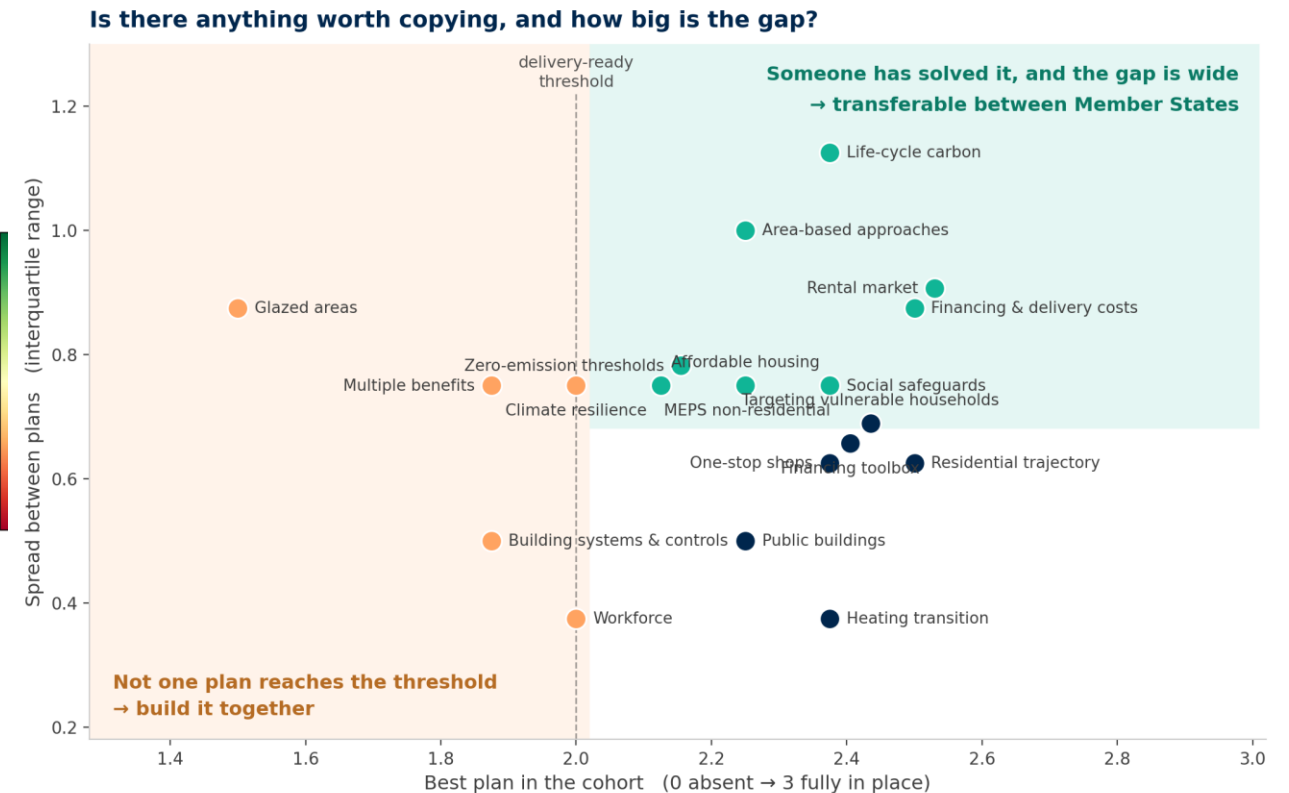
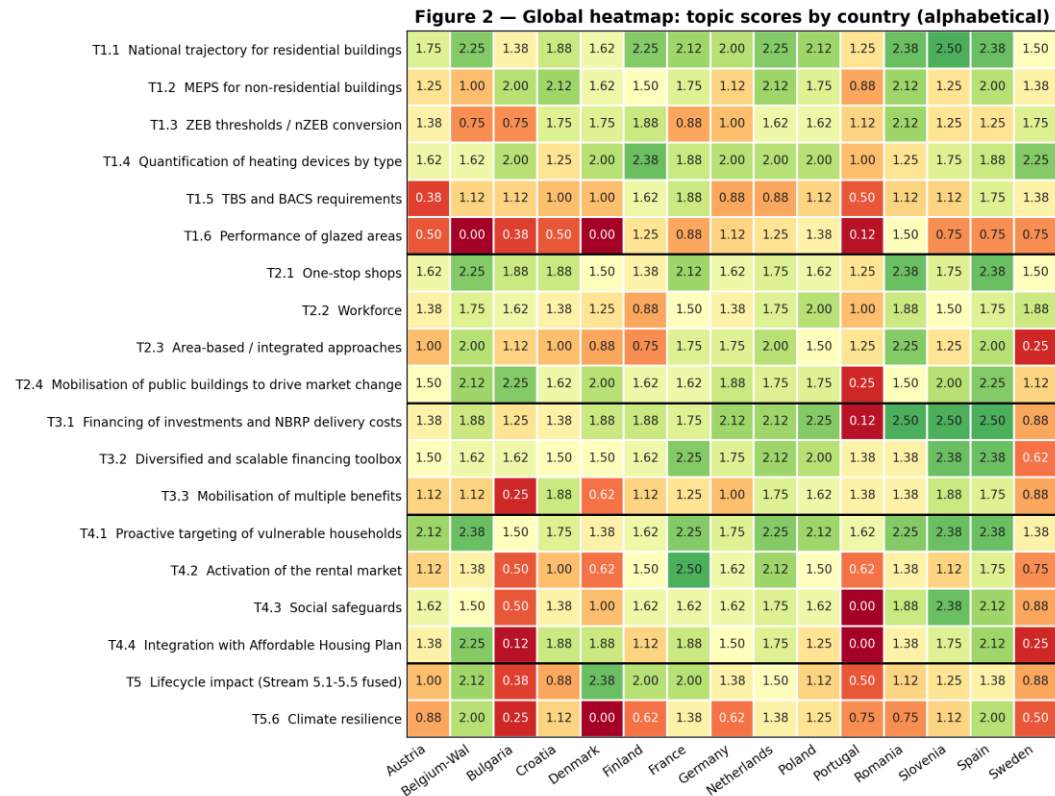
France · the Netherlands
France because its calendars are in force, not announced

And across specific domains: Denmark on whole-life carbon, binding since 2023 with tightening already agreed, and the furthest advanced on fossil heating with 95,000 gas connections already closed · Finland and Sweden on the clearest heat-transition trajectories · Poland on workforce planning · Croatia on coupling renovation with reconstruction · the Netherlands on grid capacity

No plan holds design and anchoring together for the same part of its programme.

What transfers, and what must be built together

Read the grid in rows, not in columns. On the right, the same data reduced to two questions.



Between now and the final plans

For Member States, run your plan through this:

- ☐ Does it say how much renovation activity, at what depth, in which segments?
- ☐ For each instrument: an amount, a foreseen legal basis, a date?
- ☐ Is delivery capacity sized, and budgeted separately from the works?
- ☐ Can the plan be followed: stock, measures, and multiple benefits?

For the Commission

- ☐ A common monitoring framework specified at EU level, with the building stock data behind it
- ☐ Assess delivery readiness alongside compliance with the Directive
- ☐ Organise the transfer: structured encounters between those who built what works and those about to build it
- ☐ Prioritise by dispersion: transfer where some have solved it, develop together where nobody has

Method, the seven recurring gaps, and the full scoring figures

Available on request during the discussion.

How the assessment was built

The grid

19 topics grouped in 5 clusters: targets and regulatory backbone; delivery and implementation; finance; social robustness; long-term quality and future-proofing.

8 dimensions per topic: explicitness, maturity, quantitative ambition, delivery credibility, social robustness, scalability, integration, evaluability.

Scored 0 to 3. 2.0 is the point at which a provision can be considered ready to deliver. 2,280 scored cells in total.

The process

Country leads and topic leads from the coalition extracted provisions against a common template and a shared set of guiding questions, producing one assessment sheet per country.

CLIMACT consolidated, harmonised the scoring across countries, and produced the comparative reporting.

Limits

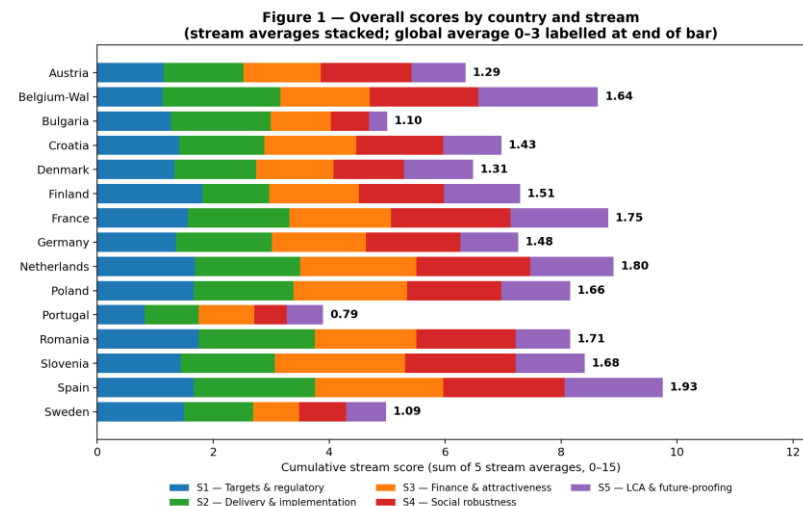
Assessors differ, so harmonisation involved judgement. The grid measures how a plan treats a topic, not how far the country already is. And plans are moving: each was assessed on a stated version.

The seven recurring gaps

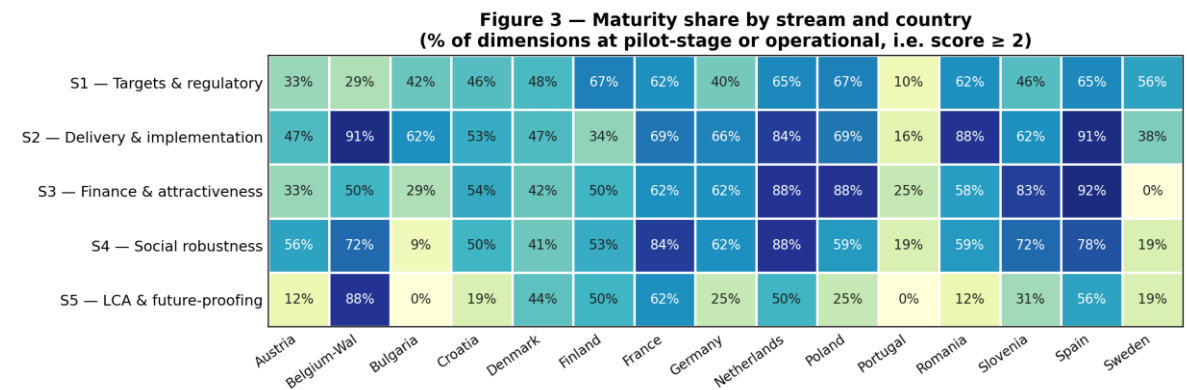
- 1 Long-term targets are quantified, but not translated into renovation activity by segment
- 2 Regulatory trajectories and thresholds remain incomplete or non-binding
- 3 Investment needs are identified but the related budgets are not sourced
- 4 Declared maturity is not budgeted maturity
- 5 Delivery capacity is not dimensioned, and the plans diverge on who is meant to deliver
- 6 Renovation is not articulated with the transformation of the energy system
- 7 The plans are not built to be verified

Taken together they produce one outcome: each plan holds parts of a delivery system, and none yet holds one.

Overall scores and maturity, by country



Full figures in the report.





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Empowering **you** to act
on **climate change**

Thank you.

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National Building Renovation Plans Webinar



The Danish National Building Renovation Plan



David Herrmann

Danish Energy Agency

Head of Unit, Energy Efficiency and Data



Nina Helene Hilbard

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Teamlead, Energy Efficiency and Data





Energistyrelsen

Danish NBRP – from concept to practice

David Herrmann, Head of Unit
Energy Efficiency and Data

22-09-2026



Today's topics

One-Stop Shop –
implementation of a
broad information
scheme across platforms.

Renovation of the public
building stock – leading
by example.

The utilization of
digitalization and data in
the implementation of
EED and EPBD.

One-Stop Shops

- Since the oil crisis in the 70's, Denmark has used communication and information as a tools to reach both citizens and business'
- On sparenergi.dk everyone can find information on
 - Subsidy schemes
 - advice on energy savings
 - EPC labels
 - Cases
 - Campaigns
 - Etc.



SparEnergi
Energistyrelsen

An online one-stop shop at:
<https://sparenergi.dk/>

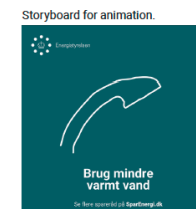


National Energy Efficiency Campaign 2022-2023



Forslag til posttekst:
Du sparer 5 % på varmeforbruget, hver gang du skruer én grad ned. Sæt termostaterne ens i alle rum, og hold mindst 18 grader, så der ikke kommer skimmelsvamp. Så sparer vi sammen på energien.

Se flere spareråd på SparEnergi.dk



Forslag til posttekst:
Du bruger cirka 1/3 af dit varmeforbrug på varmt vand. Spar på det varme vand ved at tage kortere bade, skrue ned for temperaturen og vaske hænder i koldt vand. Så sparer vi sammen på energien.

Se flere spareråd på SparEnergi.dk

Door hangers



The Public Building Stock in Denmark

State institutions

- Government buildings (office buildings, universities, museums etc.)
- Around 1.300 workplaces and 172.000 employees
- 13.1 million square meters

Municipalities

- Municipal buildings (schools, public libraries, elderly homes...)
- 98 municipalities and around 525.000 employees
- 28 million square meters

Regions

- Regional buildings (hospitals, office buildings etc.)
- 5 regions and around 135.000 employees
- 4 million square meters

The Danish approach to EE in Buildings

Energy Efficiency Directive (EED)

The public sector leading by example – Article 6 in the directive

- Each year (from 2026 to 2030) at least 3 % of the public buildings has to be designated for renovation
- The renovation has to be before 2040 and the building has to meet the standard of “nearly zero-energy building”
- The legal framework is an executive order and a political agreement

Key drivers for the political agreement

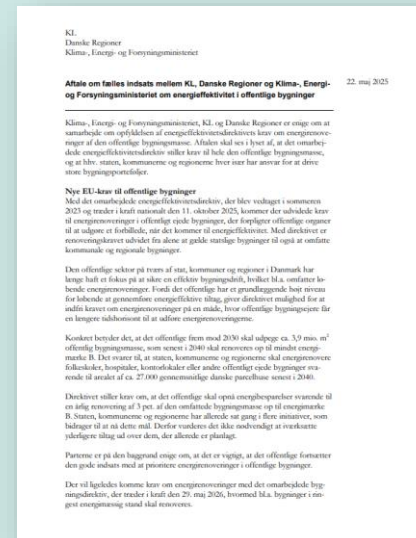
- Flexibility for municipalities, regions, and the state
- Balance between green transition, investments, and operational reliability
- The Danish Energy Agency will provide a free tool that can be used to fulfill the obligation



Danish Ministry of Climate,
Energy and Utilities



**DANSKE
REGIONER**



The utilization of data and digitalization

Denmark is one of the most digitalized countries in the world and one of the societies where citizens have the greatest trust in the public sector

The gathering of data about buildings etc. has been ongoing since the 80's

Every building owner is obliged to disclose information on their property if something changes (heat source, new building)

The analyses of buildings is only as good as the data is – and there is still data gaps despite obligations to have update data on all buildings

Thank you for your
attention



The Spanish National Building Renovation Plan



Ainhoa Díez de Pablo

Spanish Ministry for Housing and Urban Agenda

Head of Building Innovation and Sustainability Unit

Key Elements of the Spain's NBRP:

Co-creation Process and Building Stock Modelling

Ainhoa Díez de Pablo
Head of Building Innovation and Sustainability Unit
Spanish Ministry for Housing and Urban Agenda



NBRP OUTLINE



Executive summary

Introduction

1. Overview of the building stock
2. Roadmap for 2030, 2040 and 2050
3. Seven policies for energy renovation
4. Scheme of investment needs, budgetary and administrative resources
5. Thresholds for new and renovated zero-emission buildings
- 6. MEPS for non-residential buildings**
- 7. Renovation trajectory for the residential building stock**

ANNEX I – Public Participation

ANNEX II – Simplified energy model for the built stock

ANNEX III – Estimation of the renovation rate of the residential building stock

ANNEX IV – Glossary

ANNEX V – ARCE 2050 Viewer: digital tool for the NBRP 2026

CO-CREATION PROCESS

ARCE 2050 digital tools

- **ARCE 2050 Webpage:**
<https://www.mivau.gob.es/arquitectura-edificacion/arce-2050/>
- **ARCE 2050 Newsletter**
- **ARCE 2050 Viewer**



CO-CREATION PROCESS

ARCE 2050 digital tools

Official consultation

- **Prior public consultation** (2nd-30th April 2025): 500 contributions
- **Public consultation** (draft, 28th November-13th December 2025): 725 contributions

Co-creation

- **4 working groups:** Interministerial, Regional, Municipal and Private sector
- **5 expert panels** (15-20 experts per panel): Energy poverty, Business models and financial instruments, Management tools, Research, innovation and industrialization, Non-residential buildings.
- **4 plenary meetings:** > 400 participants



BUILDING STOCK MODELLING

Data sources

- **Cadastral information** (building level by cadastral reference):
 - Other: use, year of construction, location (climate zone)
 - Building geometry: height, compactness, total floor area, above-ground floor área
- **Institute for the Diversification and Saving of Energy (IDAE)**: total energy consumption and consumption by energy Carrier
- **LTRS 2020**: energy consumption by use/service



DATA

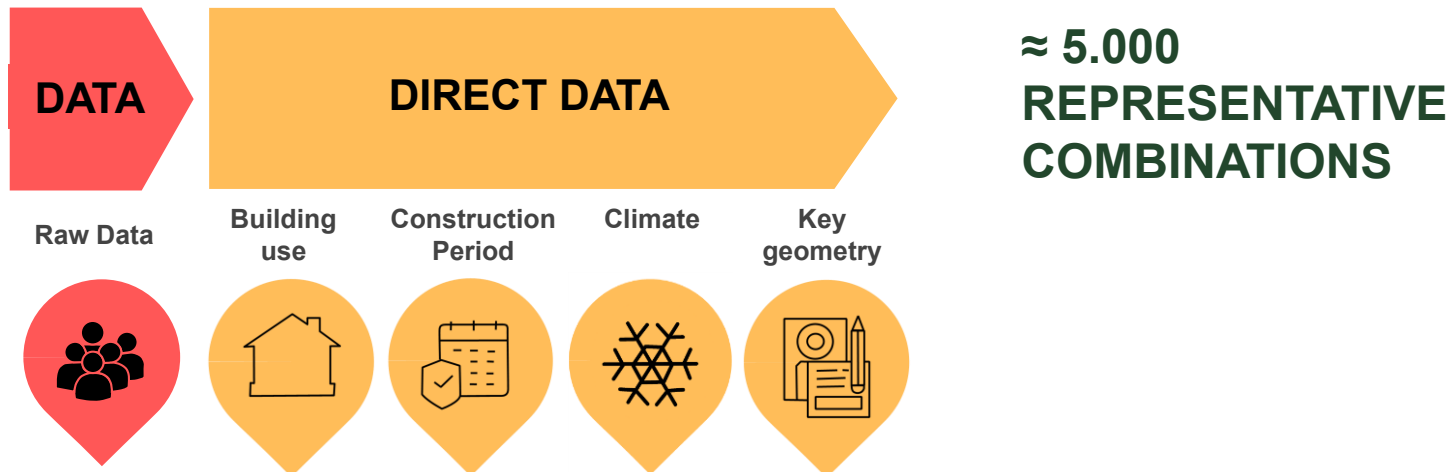
Raw Data



BUILDING STOCK MODELLING

Direct data attribution (assignment of available building data to each cadastral reference)

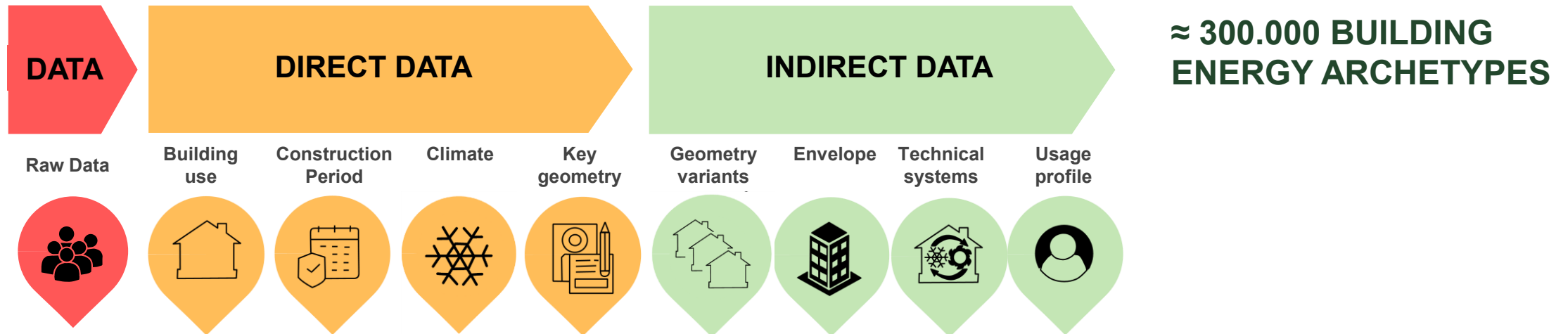
- **Building use:**
 - Housing: Collective/single housing
 - Non-residential: Offices/Commercial/Hospitality and Residential Care Facilities/Other
- **Year of construction:** <1940, 1941-1960, 1961-1980, 1981-2007, 2008-2014, 2015-2020, >2020
- **Climate zone:** a, A, B, C, D, E (National Building Code)
- **Key geometry:** Compactness, number of above-ground floors, floor area



BUILDING STOCK MODELLING

Indirect data attribution (completion of missing data using inference and statistical proxies)

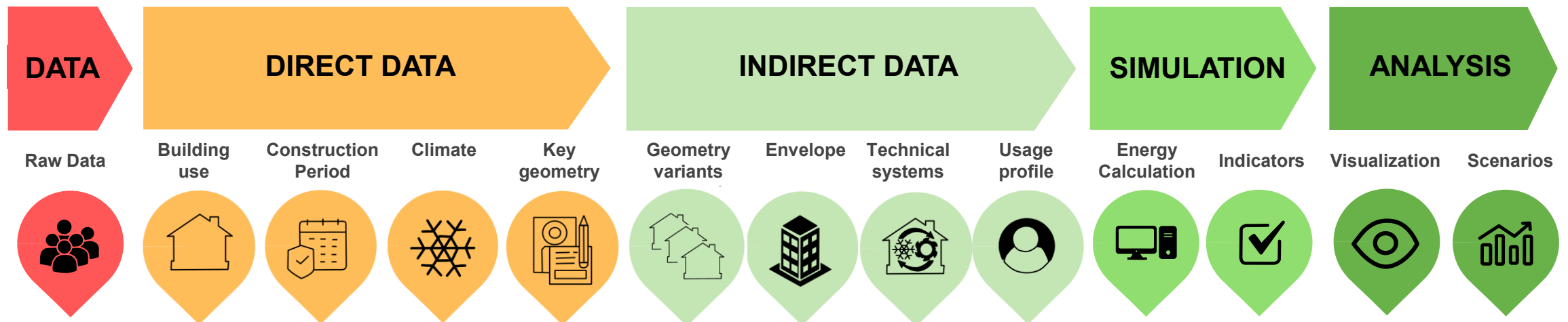
- Geometry variants (inference)
- Building envelope (inference)
- Technical systems (statistical proxies)
- Usage profile (inference)



BUILDING STOCK MODELLING

Simulation and analysis

- **Energy calculation:** Openstudio + proprietary tool for postproduction
- **Indicators:** primary energy use, non renewable primary energy, emissions
- **Visualization:** ARCE 2050 Viewer
- **Scenarios:** MEPS, residential stock renovation trajectory, non-residential renovation trajectory



LESSONS LEARNED

Co-creation Process:

- Time and resource-intensive, requiring careful expectation management
- Improved the quality of the NBRP and strengthened stakeholder support

Building Stock Modelling:

- Requires significant investment and reliable, continuously updated datasets
- Enabled rapid scenario development, evidence-based policymaking and long-term analytical support
- Reusable and regularly updateable with new cadastral and statistical data

The Portuguese National Building Renovation Plan



João Simões

ADENE - Agência para a Energia

Technical Specialist and Team Leader





Webinar on Portugal's National Building Renovation Plans

DRAFT REVIEW · EPBD NATIONAL BUILDING
RENOVATION PLAN

01/09/2026



A renovation opportunity at national scale

Portugal's building stock is large, old and largely unrated - precisely the conditions in which a well-designed renovation plan creates the most value.

7.1M

buildings nationwide

mainland Portugal, Madeira and the Azores

1.78bn m²

total floor area

residential + non-residential combined

93%

built before 1st EPBD

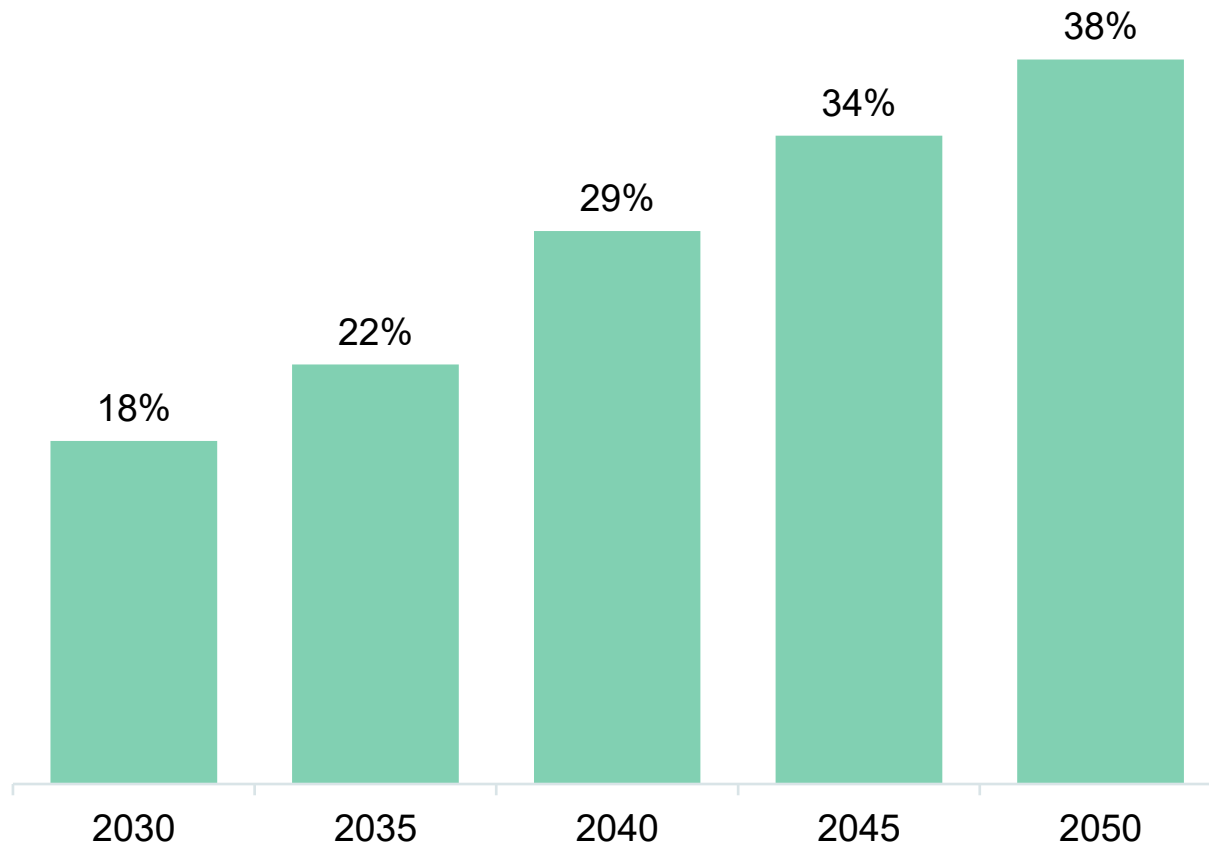
predating Portugal's first thermal-performance rules

25%

of the stock is energy-certified

the scale of the diagnostic gap PNRE addresses

A technically grounded path to a decarbonized 2050



Milestones set out in the national residential renovation trajectory (2020 baseline of 175 kWh/m²·yr):

- Built bottom-up from real building archetypes across every climate zone and territory — mainland, Madeira and the Azores.
- Deliberately “front-loads” effort moderately, then accelerates 2035–2045 as heat-pump and storage costs fall, before easing to reflect realistic technical limits.
- Presented in the plan itself as a technically robust, politically achievable trajectory — designed to hold credibility with the European Commission over three decades.

One plan, every lever: a full renovation toolbox

1

Building Code

Legal backbone for high-performance construction and renovation, across every scale of intervention.

2

Renovation Passport & Digital Building Logbook

An individualised, phased technical roadmap that follows each building through its full decarbonisation journey.

3

“Espaço Energia” one-stop-shop network (ADENE)

Guaranteed coverage of at least one desk per 80,000 inhabitants, prioritising older and more vulnerable areas.

4

Portal casA+

A single digital gateway consolidating funding lines, technical guidance and success stories for citizens and businesses.

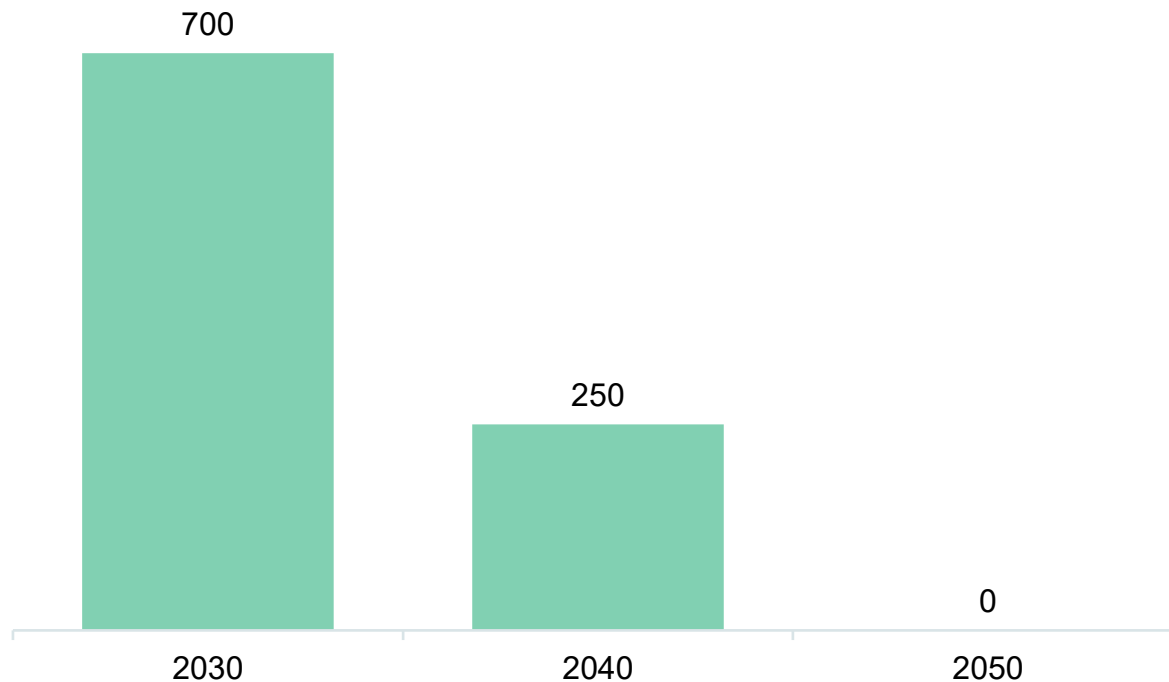
5

National network of C&D-waste material banks

29 hubs — at least one per mainland district and per island of the autonomous regions — feeding a circular materials market.

Equity built into the numbers, not bolted on

Households spending over 10% of income on energy
(thousands)



Energy poverty is targeted for full eradication by 2050 — tracked by a dedicated national observatory (ONPE-PT).

- Parallel targets for summer thermal comfort and damp/mould exposure, both aiming below 5% of the population by 2050.
- Rental sector (~18% of housing stock) addressed directly: split-incentive tax relief when a rented home reaches NZEB or ZEB.
- Builds on active housing programmes — 1.º Direito, Porta 65 Jovem, the affordable public rental stock — rather than starting from zero.

Built around how Portuguese buildings are actually owned

Condominium-ready financing

A new legal status for owners' associations and condominium councils gives collective bodies direct eligibility for grants, subsidised loans and risk-sharing mechanisms — turning apartment-block decision-making from a blocker into a financeable pathway.

Flagged by independent EU reviewers as rare among national renovation plans — a direct answer to Portugal's apartment-dominated urban stock.

Neighbourhood-scale pilots

Coordinated renovation pilots across 9 cities — with at least one in each autonomous region — target clusters of condominiums, social housing and cooperatives together, paired with urban measures such as tree planting and zero-emission zones.

Area-based delivery lets technical, economic and social gains reinforce each other — instead of one building at a time.

A forward-looking, innovation-ready agenda

1

Circular economy & New European Bauhaus

Biomaterials (wood, cork) as carbon sinks; digital material and building passports for traceability.

2

Whole life-cycle carbon

A national methodology for embodied + operational GWP is already being developed and published.

3

Indoor environmental quality

Comfort, air quality and health recognised as core renovation co-benefits, not side effects.

4

Nature-based climate resilience

Urban heat, stormwater and microclimate criteria built into renovation support programmes.

5

Water–energy nexus

Efficiency measures designed to cut both energy and water use together, e.g. in hot-water systems.

6

Voluntary pilot-building network

A cross-disciplinary testbed connecting research institutions with real renovation projects.

From draft to final: closing the loop by end 2026

1 Quantify the investment envelope

Set out the total financing need and the public/private split, by period.

2 Turn the trajectory into annual targets

Convert the 2030–2050 milestones into fully specified annual renovation rates.

3 Finalise non-residential MEPS & ZEB thresholds

Complete the modelling work already under way for non-residential buildings.

4 Embed binding social safeguards

Add anti-renoviction protection and formal links to the Affordable Housing Plan.

5 Make public buildings lead by example

Turn the public-sector strategy into a binding, market-shaping renovation rate.

Already grounded in dialogue: the draft's public consultation annex responds point-by-point to submissions from municipalities, professional bodies and civil society — a working feedback loop the final version will build on.

National Building Renovation Plans Webinar



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Thank you!

www.renovate-europe.eu

