RENOVATE2RECOVER:
HOW TRANSFORMATIONAL ARE THE NATIONAL RECOVERY PLANS FOR BUILDINGS RENOVATION?

NATIONAL PARTNER: DENEFF

COUNTRY: GERMANY

OVERVIEW:

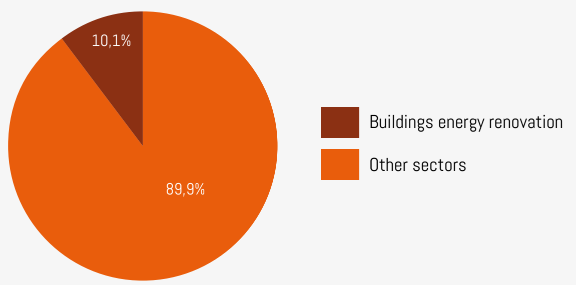
Germany's profile is based on information provided by Renovate Europe's German National Partner: the German Corporate Initiative on Energy Efficiency (DENEFF). This Country Profile focuses on the buildings elements of Germany's National Recovery and Resilience Plan (NRRP) endorsed by the Commission in June 2021.

The Plan allocates additional funding to existing energy efficiency programmes and sets some intermediate milestones for 2023 and 2026, which could be more precise and more clearly linked to specific investment gaps. The NRRP is a helpful addition, although small in comparison to existing renovation programmes, which themselves are still insufficient to achieve climate targets. The Plan itself can be further improved by strengthening supply chain development and additional project support, especially through skills programmes, technical assistance, by increasing the role of federal one-stop-shops and stronger alignment with Germany's renovation strategy.

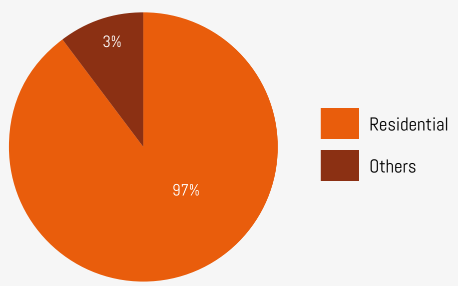
BUILDINGS IN THE CONTEXT OF THE PLAN

In total, Germany plans to invest €140bn in recovery measures. Germany's NRRP is just a part of this, comprising close to €26bn from the EU Recovery and Resilience Facility (RRF). Close to €2.6bn of that (~10%) is allocated to renovation. These funds exclusively target the residential sector as federal funding for energy-efficient buildings, while Germany's overall recovery package targets other building sectors as well. €57m are allocated to municipal living labs, which are conducting research on the energy transition and their implementation until 2026; and €20m will support the development of climate-friendly construction with timber, running to the end of 2021. A further €500m is allocated to a special "child day care expansion" programme including new buildings, conversions, renovations, and equipment (not included in the figure below). Green Recovery Tracker analysis suggests that most building-related measures are likely to have a very positive impact on the green transition.

Share of NRRP funding for buildings energy renovation (%)



Energy renovation by sub-sector (%)



National Challenges

A study for the EC[1] based on data from 2012-2016 estimated that only 0.9% of residential sector renovations in Germany were medium depth and 0.1% deep renovations. For non-residential buildings it is estimated that only 1.3% of energy renovations were medium depth, and 0.2% deep. According to DENEFF, the funding landscape is already in place in Germany, but that a longer-term policy outlook for investors and the construction industry are needed to significantly scale up deep renovation.

[1] Comprehensive study of building energy renovation activities and the uptake of nearly zero-energy buildings in the EU - Publications Office of the EU (europa.eu)

Renovation plan details

CLARITY AND DEPTH OF AMBITION

Germany's NRRP reiterates the EU's strengthened goal of reducing greenhouse gas emissions by 55% by 2030. It references Germany's Long Term Renovation Strategy (LTRS) but does not mention overarching energy efficiency or renovation rate goals. The Plan's residential programme aims to achieve deep renovation of 40,000 dwellings by 2026, corresponding to a renovated area of 3,676,000 m^2. Germany's LTRS sets the target of increasing the renovation rate from 1.3% to 2% for single and two-family houses and from around 1.5% to over 2% for apartment blocks by 2030. Milestones are set for dwelling renovations carried out and projects approved by 2026. Holistic upgrades and the application of the Energy Efficiency First Principle are not explicitly mentioned, but for the residential sector the expectation is that projects will deliver, on average, a minimum of 45% of primary energy demand savings and potentially significantly more (70% savings) through bonuses for renewable energy and energy efficiency.

FINANCIAL LANDSCAPE AND PERSPECTIVE

Germany's LTRS only laid out 2018 energy renovation investment figures: €182m worth of grants triggering private investment of €734m. Neither the National Energy and Climate Plan (NECP) nor the NRRP include estimates of the overall investment need for renovation or the investment gap. The investment contribution of the NRRP towards LTRS goals is therefore unclear. The NRRP mentions carbon pricing and the potential for revenue generated to be recycled to further climate protection measures, tax incentives or a 'carbon dividend' paid to low-income households. The NRRP measures are expected to be prolonged after 2026 with national funding.

MULTIPLE BENEFITS AND INTEGRATION

The NRRP's residential renovation programme does not set out whether it will target low-income households, or those in energy poverty. The Plan highlights the use of digital tools to achieve a higher rate of decarbonisation: one already existing digital programme is now under the NRRP newly eligible for support in the overarching programme for buildings. It promotes **digital monitoring of energy efficiency and optimisation** of energy consumption in buildings. The NRRP's innovation initiative for timber construction has links to the **circular economy** and the use of **sustainable materials.** Beyond, this – while Germany's wider recovery package is to invest significantly in heat decarbonisation – the NRRP does not integrate renovation with further priorities.

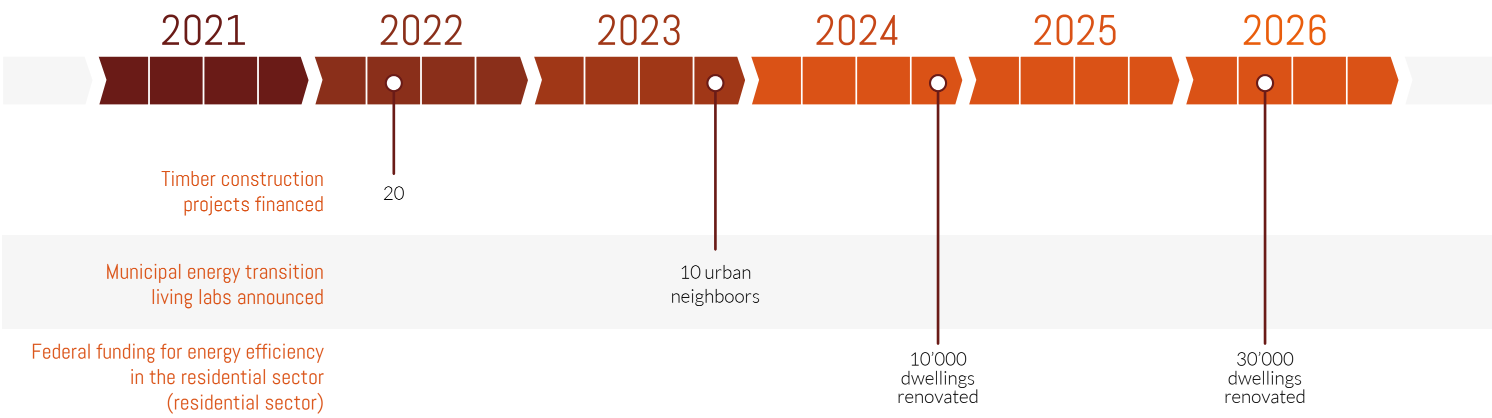
SUPPLY CHAIN AND PROJECT SUPPORT

Supportive measures like technical assistance, upskilling for energy and construction professionals and the development of renovation project pipelines are critical to scaling up the rate of deep renovation. Germany's NRRP includes measures for knowledge transfer and training, designed to build knowledge clusters in timber construction methods. The NRRP does not outline further capacity building and technical support for end-users, businesses, or local administrations.

IMPLEMENTATION FRAMEWORK

The NRRP sets milestones and targets for 2024 and 2026 for the number of renovated dwellings and funded projects, contributing towards a floor area renovation estimate of 3,676,000 m^2 (approximately 0.1% of Germany's residential floor area). The Ministry of Economy is primarily responsible for overseeing the measures while Germany's National Public Bank (KfW) and Federal Office for Economic Affairs (BAFA) are tasked with implementation. Specific mechanisms are in place to measure progress with a dedicated coordination unit at the Federal Ministry of Finance.

TRACKING/ TIMELINE TO 2026



RECOMMENDATIONS FOR IMPROVEMENT DURING IMPLEMENTATION

Germany's NRRP needs to be understood in the context of its wider recovery package and existing policy framework. The Plan's renovation components are quite tightly focused, with the bulk directed at residential deep renovation with an emphasis on innovation. With this and other measures, there is therefore an opportunity to:

- Set quantifiable targets for overall renovation rate increase, energy and emissions savings, in line with LTRS targets, and transparently apply the Energy Efficiency First Principle, which the EU intends to strengthen.
- Monitor whether existing technical support resources, learning capabilities and training provision will be sufficient to rapidly scale up and mainstream the innovation-focused deep renovations planned, and increase capacity in these areas as needed.
- Set out a roadmap to increase the role of sustainable timber and sustainable materials in construction and renovation that includes how the Plan's living laboratories can increase momentum.

NOTE

The survey was complemented with a targeted desk-based review of Germany's Long-Term Renovation Strategy (LTRS) to place its NRRP in context. Data regarding the breakdown of the NRRP by sector is from the Green Recovery Tracker and is based on the same draft Plan.

Relevant extracts from the Commission Staff Working Document and the Council Implementing Decision for the German NRRP

This Annex is to be read as a supporting document to the Country Profile. While the Country Profile centres more specifically on the renovation-related investments, the Annex is more broad and covers the climate-related reforms and investments of interest to buildings.

Measure/Sub-Measure Name	Budget (EUR million)	Deadline	Instalment	Milestone/ target
COMPONENT 1.3: CLIMATE-FRIENDLY RENOVATION AND CONSTRUCTION In the building sector, Germany aims to reduce CO2 emissions by around 40% by 2030 compared to current levels (120 million tonnes of CO2 equivalent in 2020). By 2050, Germany aims to achieve net-zero GHG emissions, including for the building stock in Germany. At the same time, it must be ensured that construction and housing remain affordable. The climate-friendly construction and renovation component aims at contributing to the achievement of these objectives by increasing energy efficiency and the share of renewable energy in final energy consumption for heating and cooling in buildings. Accompanying measures for the timber construction sector towards digitalisation, circularity and climate-friendly practices shall also be undertaken as timber is identified as having the potential to constitute a climate friendly and resource-efficient building material, as well as leading to cost-effective and time-efficient construction and renovation methods.				
1.3.1 Investment: Support programme for the development of a climate-friendly timber construction The objective of this investment is to accelerate the development, deployment and diffusion of innovative technologies, processes, products and services (digital transformation) to increase the use of timber as a climate-friendly building material. The measure is also intended to help overcome structural disadvantages and obstacles in order to be able to establish construction with timber on an equal footing in large-scale, multi-storey construction. To overcome the challenge of transfer of knowledge, innovation and technology between research and practice, the measure further aims to improve the networking between businesses, academia and research institutions related to climate-friendly construction with timber. To that end, the measure shall focus support on advisory services (analysis, evaluations and recommendations) directed towards increasing the use of timber (coniferous/deciduous) and related to digitalisation, service and business innovation, business optimisation, and recyclability of construction products. The measure shall also focus on the development of innovation clusters related to innovation and development of climate-friendly timber construction. Given the structure of the sector, SMEs are expected to be the main beneficiaries of the support.				
		Q1 2021/ Q2 2022	1/2	By Q1 2021, the guidelines have been published in the Federal Gazette (Bundesanzeiger), enabling companies and eligible organisations to apply for funding. By Q2 2022, at least 20 projects have been approved, enabling the beneficiaries to start their implementation.
1.3.2 Investment: Municipal living labs for the energy transition Municipal living labs for the energy transition explore and demonstrate innovative solutions for the efficient and sustainable energy supply of urban neighbourhoods. Technological and non-technical innovations are tested in a real-world environment, thereby contributing to technology development and market penetration, whilst serving as a blueprint for the subsequent large-scale roll-out of integrated solutions. Living laboratories (including this measure) are one of the sector coupling measures of the German National Energy and Climate Plan (NECP).				
	57	Q4 2023/ Q1 2026	3/5	By Q4 2023, at least four joint living labs projects have been approved through a grant decision, enabling the start of their implementation. By Q1 2026, innovative installations for efficient and sustainable energy supply have been tested and are operational in 10 urban neighbourhoods. The 10 implemented neighbourhood projects demonstrably achieve a reduction in primary energy demand compared to conventional energy supply for buildings, thus contributing to decarbonisation in the building sector.
1.3.3 Investment: Building renovation: federal funding for energy-efficient buildings This investment measure focuses on support to the energy-efficient renovation of residential buildings. The measure shall achieve, on average, at least a medium-depth level renovation as defined in Commission Recommendation (EU) 2019/786 on Building Renovation . More specifically, given the current state of housing stock and the minimum requirement to obtain support under the measure (the renovated building must achieve at minimum Energy class 100) it is expected to achieve on average a minimum of 45% of primary energy demand savings and potentially significantly more (70% savings) through bonuses for renewable energy and better classes of energy efficiency. The implementation of the measure under the German recovery and resilience plan is expected to start by 1 July 2021 and shall be completed by 31 August 2026. In addition, Germany is planning to prolong the measure beyond 2026 with funding under its national budget.				
	2500	Q3 2021 Q4 2024 Q2 2026	1/4/5	By Q3 2021, the guidelines have been published, enabling households and eligible organisations to apply for funding. By Q4 2024, at least 10.000 housing units have been renovated under the support scheme; the corresponding works have been fully carried out and the corresponding grants have been disbursed. By Q3 2021, the guidelines have been published, enabling households and eligible organisations to apply for funding. By Q4 2024, at least 10.000 housing units have been renovated under the support scheme; the corresponding works have been fully carried out and the corresponding grants have been disbursed. By Q2 2026, at least 40.000 (baseline 10.000) housing units have been renovated under the support scheme; the corresponding works have been fully carried out and the corresponding grants have been disbursed

Measure/Sub-Measure Name	Budget (EUR million)	Deadline	Instalment	Milestone/ target
COMPONENT 4.1: STRENGTHENING OF SOCIAL INCLUSION This component of the German recovery and resilience plan mobilises resources to improve different aspects of social inclusion: (i) labour market inclusion of women and parents in general, (ii) improving educational outcomes and skills for students with a learning backlog, often from disadvantaged backgrounds, (iii) safeguarding apprenticeships, thereby supporting the labour market entry for young people, (iv) protecting take-home pay and jobs by avoiding an increase in the tax wedge, and (v) improving transparency throughout all three pillars of the pension system and thereby access to social protection.				
4.1.1 Investment: Investment programme 'Childcare-financing' 2020/21: special fund 'Child Day-care Expansion' The objective of the measure is to promote the creation of new childcare facilities and the refurbishment of existing facilities, which shall create 90.000 additional places. For this purpose, the federal government provides support to Länder and local authorities so that these invest in new buildings, extensions, conversions, refurbishments, renovations and equipment.				
	500	Q4 2023/ Q4 2025	3/5	By Q4 2023, an interim report on approved and created childcare places and investments in equipment (§ 30 (2) and (3) KitaFinHG) has been published. The relevant Länder have reported to the federal government on the state of implementation, including on funding, number of childcare places, number of subsidised equipment, in accordance with the monitoring and guidance obligations. By Q4 2025, the Länder have submitted their final report on implementation after completion of the checks on the use of funds. The report confirms that 90.000 newly funded childcare places for children prior to school entry have been created in child day-care facilities (Kindertageseinrichtungen) and child day-care services (Kindertagespflege) throughout Germany.
COMPONENT 6.2: REDUCTION OF BARRIERS TO INVESTMENT				
6.2.1 Reform: Joint programme of the Federal Government and the Länder for an efficient administration that benefits citizens and businesses The objectives of the measure are to make the administration more efficient, future-oriented and innovation-inducing. It aims, among other things, to accelerate planning and approval procedures, to further standardise the requirements faced by lower levels of government for requesting financial subsidies in order to ensure a faster outflow of funds, to accelerate housing construction, and to increase the number of successful transfers of business ownership to the next generation. The measure consists of establishing a working group comprised of the federal level and the Länder, which shall develop proposals to improve the efficiency of public administration in 11 areas (as detailed in the milestones) that shall be implemented by 2025.				
		Q2 2021/ Q2 2022/ Q1 2025	1/2/4	By Q2 2021, the first report to the heads of government of the Federal Government and the Länder has been published and shall encompass a list of those measures from the Federal/Länder programme of measures which shall be further examined and processed. The starting point of the report are the following eleven areas of action: —Accelerating the outflow of grants; —Identifying obstacles to the outflow of grants and reporting them to the Federal Ministry of Finance; —Improving the financial support of municipalities; —Streamlining and making grants from the Federal Government to the Länder and municipalities as uniform as possible; —Improving transfer of business ownership through a dedicated task force; —Revising the Musterbauordnung (model building code); —Strengthening planning and approval authorities; —Improving recruitment of skilled staff and ensuring an improved staffing situation; —Accelerating planning, in particular rail, local public and private transport; — Streamlining the consultation process and public participation procedures and simplifying participation through digitalisation; —Further accelerating planning and approval processes.

EXPLANATORY DOCUMENT TO ACCOMPANY COUNTRY PROFILES

READ THE FULL STUDY ON WWW.RENOVATE-EUROPE.EU

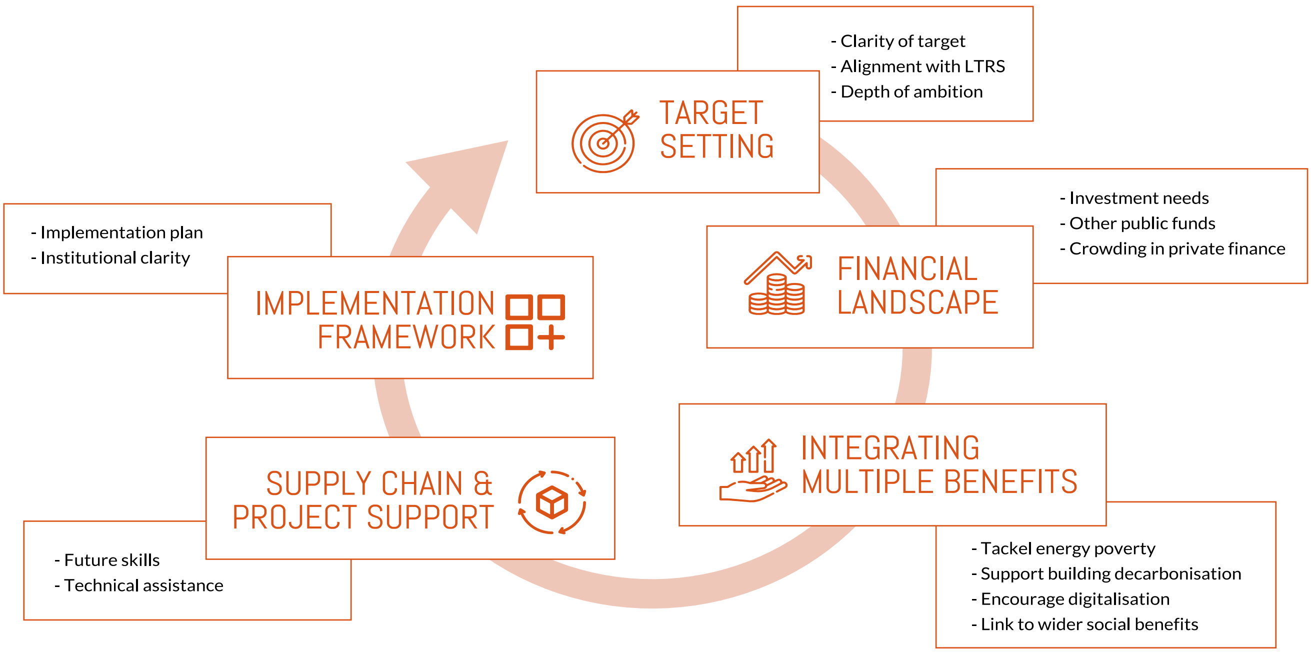
ABOUT THIS STUDY

This Study assesses the buildings-related elements of the National Recovery and Resilience Plans (NRRPs) in 18 Member States[1]: Austria, Belgium, Bulgaria, Croatia, Czechia, Denmark, France, Germany, Greece, Hungary, Ireland, Italy, Latvia, Poland, Romania, Slovakia, Slovenia and Spain[2]. The aim is to understand whether NRRPs position countries to achieve longer-term targets for more and deeper renovation, and whether NRRPs have the potential to be **'transformational'** on the path to achieving national goals set out in Long Term Renovation Strategies and EU goals set out in the Renovation Wave strategy.

The Country Profiles in this Study centre on the **investment measures** for energy renovation in the NRRPs. The aim is to identify where investments will flow, what types of energy renovation will be supported, and to offer guidance to support and improve the quality of investments to maximise their impact and scalability. The Study does not assess the reform measures included in NRRPs due to their uniqueness for individual countries.

ASSESSMENT METHODOLOGY AND SCOREBOARD

The Study was developed by E3G, bringing its experience of working on the Green Recovery Tracker, and was delivered in close cooperation with Renovate Europe's National Partners and Campaign Office. In each Country Profile, the Plans are assessed against five overarching criteria, each comprising several sub-criteria (summarised below). The assessment is **qualitative.** Each Country Profile is accompanied by an annex that sets out, in more detail, the various programmes and reforms that each Member State includes in its NRRP with extracts drawn from the European Commission's assessment of the NRRPs and the European Council's Implementing Decision for each NRRP.



1 Note: summary data here excludes Greece as the study is not complete yet

2 Renovate Europe has National Partners in 17 of these Member States, and cooperated on a separate basis with Mur Manteau and Renovons initiative in France. Renovate Europe's 18th National Partner (in the Netherlands) was unable to participate in this Study as the Dutch NRRP has not yet been published.

SCORING METHODOLOGY

For each of the five criteria, the NRRPs are provided with an aggregate score. The aggregate score is based on the sum of points of individual sub-criteria. The points were allocated as follows: 1 point - not addressed; 2 points – needs improvement; 3 points – strong; 4 points - transformational. The aggregated score is reflected in the 'play button' infographic for each of the criteria at the top of the country profiles. Those are summarised below.

Normalised* points range	Score	"Play button" Infographic
2.5 – 4.0	"Not addressed"	
4.1 – 6.3	"Needs improvement"	
6.4 – 8.5	"Strong"	
8.6 – 10	"Transformational"	

** The five criteria have a different set of sub-criteria, and as a result have different minimum and maximum points. The scores have been normalised to a base of 10 points. This still leaves some variation within the ranges, so comparison between criteria and countries should be treated with caution.*

A UNIQUE OPPORTUNITY TO GET RENOVATION ON TRACK

National Recovery and Resilience Plans (NRRPs) present a unique opportunity to accelerate the delivery of deep renovation across the EU. The analysis of the NRRPs in this Study demonstrates that significant renovation activity is planned and will be made possible through the successive disbursements of the Recovery Funding. But these renovations must be done properly, and the money must be spent well. This unprecedented additional injection of public funds must set the EU building stock firmly on the path to achieving its Renovation Wave goals to 2030 and meeting the 2050 climate targets.

For NRRPs to be transformational towards achieving these goals, two key aspects need to be strengthened:

1. **Ensure funding delivers a step change towards realising deep (or staged deep) renovations, going well beyond the 30% minimum energy saving recommendation set by the European Commission.**

2. **Invest in the right enabling framework, including leverage of private finance, to create sustainable renovation markets that will grow beyond 2026**

UNDERPINNING A STRONG FIT-FOR-55 PACKAGE FOR BUILDINGS

This Study demonstrates significant interest in investing in building renovation, which can contribute to a strong outcome for the **Fit-for-55 legislative proposals**, all of which would enter into force while NRRP funding is being invested. The strength of the overall package is critical for delivering on renovation, with individual elements playing pivotal roles. For example, the introduction of mandatory **Minimum Energy Performance Standards** (MEPS) under the EPBD would send a strong signal to the whole renovation value chain, from institutional investors to building users.

Done right, NRRP investment can ease agreement on, and the implementation of, a more ambitious legislative package for buildings – a virtuous cycle between ambition and deliverability that can drive the creation, investment in, and sustained growth of renovation markets across the EU. To unlock this, it will be critical to establish a positive feedback loop between EU institutions (in supporting effective deployment of NRRP funds) and Member States (in backing a strong legislative outcome from Fit-for-55 negotiations) that delivers a significantly improved building stock for citizens. Informed by the assessment below, Renovate Europe and its National Partners will work to support this outcome.

RENOVATE 2 RECOVER

NINE RECOMMENDATIONS TO MEMBER STATES TO MAKE THEIR RECOVERY PLANS TRANSFORMATIVE

AMBITION

1. Prioritise deep renovations and scalability in the design and implementation of schemes
2. Accompany each funded building project with a Renovation Roadmap to 2050

FINANCING

3. Improve scheme longevity and impact by crowding in private finance

MULTIPLE BENEFITS

4. Integrate renovation with heat decarbonisation and apply Energy Efficiency First Principle consistently
5. Embed renovation alongside wider political and socio-economic priorities

SUPPORT

6. Strengthen Technical Assistance at regional and local levels
7. Fund further One-Stop-Shops and information centres to support customers, exchange best practice
8. Upskill the workforce through reliable accreditation systems

IMPLEMENTATION

9. Engage in better monitoring and aggregation of data to measure impact

RENOVATE EUROPE

Extracted from the E3G/Renovate Europe Study
on National Recovery & Resilience Plans
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