DENMARK
Not addressed in NRRP
Needs improvement
Strong ambition
Transformational

National Challenges
A study for the EC estimates that for residential buildings in Denmark based on floor area only 0.6% were medium depth and a negligible amount were deep renovations. Energy renovation in non-residential buildings was estimated to include only 1.2% medium, and 0.2% deep renovations.

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

The energy efficiency component of the Plan aims to deliver at least 6,125 energy renovation projects in private households; improve the energy rating for 40% of supported municipal and regional public buildings with a current D to G rating; save at least 0.33 MtCO2e through industrial energy efficiency improvements; and replace at least 10,100 residential oil or gas boilers with district heating or heat pumps. The subsidy schemes include a list of specific technologies eligible for grants but do not include metrics to measure the depth of renovation achieved even though 30% primary energy savings are expected. Aside from the public buildings programme, due to the subsidy scheme structure, Denmark’s NRRP does not encourage ‘whole building’ renovation projects. Instead, it adds funding to existing programmes that focus on specific elements.

FINANCIAL LANDSCAPE AND PERSPECTIVE

According to Denmark’s Long Term Renovation Strategy (LTRS), the estimated investment needed for renovation in the period 2021-2050 is between €5.5 and €10.2bn. For industry and households, the NRRP significantly tops up existing funded energy efficiency programmes. The public buildings programme is new, and offers grants distributed on a first-come, first-served basis. For industry, grants are competitively allocated to projects with the highest savings potential per €. For housing, subsidy rates are set at a maximum 27.5% of estimated market prices. The Plan takes funding from other EU sources into consideration, in order to ensure complementarity and to avoid double funding. It does not set out expectations for attracting further private finance and investment.

MULTIPLE BENEFITS AND INTEGRATION

The instruments target buildings and citizens across Denmark and do not specifically target energy poor or low-income households. The NRRP includes two subsidy schemes that target the replacement of fossil heating systems with heat pumps. The NRRP does not mention the Energy Efficiency First Principle, although energy efficiency is usually prioritised in practice. Most oil boilers are located in rural areas and small towns with overrepresentation of low-income households and low property values, so the oil and gas boiler replacement programme may benefit those groups. Denmark’s Plan has a dedicated section on digitalisation, although it does not explicitly mention any sectoral investments linked to buildings, with funding for information and data initiatives planned as part of other programmes. The plan does not explicitly make links to wider renovation objectives (e.g. adaptation, seismic risk, circular materials).

SUPPLY CHAIN AND PROJECT SUPPORT

The NRRP does not set out specific additional support for technical assistance or information campaigns linked to energy renovation. Private and existing public initiatives already exist, including a Danish Knowledge Centre for Energy Savings in Buildings established by the Danish Energy Agency to collate and disseminate information for contractors and educational institutions. The NRRP highlights that its construction projects potentially support SMEs and local jobs. However, it does not include any additional funding or support for further upskilling or training programmes for building energy professionals.

IMPLEMENTATION FRAMEWORK

The NRRP was co-developed by the Danish Government and stakeholders from 13 Climate Partnerships with the Danish business community, which were initiated to help Denmark reach its goal of reducing the greenhouse gas emissions by 70 per cent by 2030 (compared to 1990). Overall, the NRRP contains 39 milestones and 38 targets. For the energy renovation component of the plan targets are set for the entry into force and end of the respective programme, with no intermediate milestones. The Ministry of Climate, Energy and Utilities is responsible for energy efficiency programme implementation which supports the Plans’ coherence with national strategies in its remit. The Ministry of Finance is tasked with overall compliance and monitoring of milestones and targets and provides competent authorities with technical assistance.
RENOVATE2RECOVER: HOW TRANSFORMATIONAL ARE THE NATIONAL RECOVERY PLANS FOR BUILDINGS RENOVATION?

Denmark’s NRRP makes a relatively modest contribution to its already substantial energy efficiency and buildings decarbonisation programmes and introduces a new public sector buildings renovation programme. To build on this and go further, steps could be taken to:

- Clarify the rate and depth of renovation that Denmark needs to achieve by 2030, and how the Plan and existing programmes contribute to this.
- Set intermediate milestones and delivery targets and clarify how progress will be monitored.
- Monitor impact of existing technical support and information provision resources on uptake and increase capacity if needed, to focus on deep and complex energy renovations.

**RECOMMENDATIONS FOR IMPROVEMENT DURING IMPLEMENTATION**

The survey was complemented with a targeted desk-based review of Denmark’s Long-term Renovation Strategy (LTRS) to place its NRRP in context.
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.

### Investment 1: Replacing Oil Burners and Gas Furnaces

The measure aims at phasing oil and natural gas out of the heating system and replaced with electric heat pumps and district heating from renewable sources. The measure shall consist in the provision of subsidies to speed up the phasing out of oil burners and gas furnaces and to reduce the cost to consumers of the conversion to green heating. The support provided by the Danish recovery and resilience plan shall scale up an existing measure. The support scheme for replacing oil burners and gas furnaces shall be distributed into the following three sub-schemes: (1) Sub-scheme for district heating (“Fjernvarmepuljen”): shall provide a subsidy to expand district heating grids into new areas; (2) Sub-scheme for decoupling (“Afkoblingsordningen”): the Danish state-owned gas distribution company charges a fee to cover the cost of decoupling. With this subsidy scheme, households may be exempted from this fee. (3) Sub-scheme for scrapping (“Skrotningsordningen”): shall provide a subsidy for companies that offer heat pumps on subscription for private year-round housing. The scheme is particularly relevant for citizens who wish to convert to a green heating. The support provided by the Danish recovery and resilience plan shall scale up an existing measure. The support scheme for replacing oil burners and gas furnaces shall be distributed into the following three sub-schemes: (1) Sub-scheme for district heating (“Fjernvarmepuljen”): shall provide a subsidy to expand district heating grids into new areas; (2) Sub-scheme for decoupling (“Afkoblingsordningen”): the Danish state-owned gas distribution company charges a fee to cover the cost of decoupling. With this subsidy scheme, households may be exempted from this fee. (3) Sub-scheme for scrapping (“Skrotningsordningen”): shall provide a subsidy for companies that offer heat pumps on subscription for private year-round housing. The scheme is particularly relevant for citizens who wish to convert to a heat pump but who have limited financing opportunities.

### Investment 3: Energy renovations in public buildings

The measure shall support a subsidy scheme that shall target energy savings actions in public buildings. The subsidy shall focus on energy renovations in regional and municipal buildings with the lowest energy performance certificate standards as well as buildings that are heated by oil burners and gas furnaces.

### Investment 4: Energy Efficiency in Households

The objective of this measure is to ensure that residential buildings are renovated and energy efficient and to speed up transition from oil burners and gas furnaces to heat pumps. The measure shall target energy savings in private housing by supporting insulation, optimization of the operation of the building or replacement of heating by oil burners and gas furnaces with heat pumps.

---

<table>
<thead>
<tr>
<th>Measure/Sub-Measure Name</th>
<th>Budget (EUR million)</th>
<th>Deadline</th>
<th>Instalment</th>
<th>Milestone/ target</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>COMPONENT 3: ENERGY EFFICIENCY, GREEN HEATING AND CARBON CAPTURE AND STORAGE</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>The objectives of this component shall be to provide stimulus and investments in energy efficiency measures to support the green transition, strengthen local job creation and ensure coherence and resilience by renovation of the existing building stock. Investments and subsidy schemes in this component shall include energy efficiency measures, conversion of oil and gas burners to sustainable heating sources and renovation of households, industries and public buildings. These shall reduce energy consumption and greenhouse gas emissions. Investing in energy efficiency measures and the renovation of buildings shall support the construction sector and subcontractors creating jobs in supported businesses. The component contains subsidy schemes targeted at both public sector buildings with poor energy labels and energy efficiency measures in the industrial sector are expected to support the economic recovery across Denmark. This component shall also promote improvement of public buildings such as day care institutions, and schools. A sub-measure is particularly relevant for households with limited financing opportunities, amongst others. These measures shall support social coherence and resilience by ensuring facilities to deliver high quality public services.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Investment 1: Replacing Oil Burners and Gas Furnaces</strong></td>
<td>65</td>
<td>Q2 2021</td>
<td>1 / 5 / 6</td>
<td>By Q2 2021, the political agreement shall be reached on how DKK 645 000 000 is to be distributed among the support schemes to phase out oil burners and gas furnaces that originates from “Energifællet 2018” and “Klimafuld for energi og industri mv. 2020”. The measure shall achieve at least a 30% reduction in primary energy demand at the level of the building.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Q1 2025</td>
<td></td>
<td>By Q1 2025, when the selection of applications for replacing oil burners and gas furnaces will have been completed.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Q2 2026</td>
<td></td>
<td>By Q2 2026, at least 10,100 oil burners and gas furnaces will have been replaced with heat pumps or district heating.</td>
</tr>
<tr>
<td><strong>Investment 3: Energy renovations in public buildings</strong></td>
<td>40</td>
<td>Q4 2021/ Q4 2023</td>
<td>1 / 5</td>
<td>By Q4 2021, the government has published the statutory order. This legal framework shall define the conditions for receiving funding under the subsidy scheme for energy renovations in public buildings, such as maximum grant size or target group.</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>By Q4 2025, the energy performance certificate of the buildings shall be improved for 40% of the buildings in the least efficient end (D-G) receiving grants from the scheme. All else being equal, this corresponds to 10 pct. of municipal and regional buildings having their energy rating improved if there is full disbursement of the scheme.</td>
</tr>
<tr>
<td><strong>Investment 4: Energy Efficiency in Households</strong></td>
<td>63</td>
<td>Q1 2025/ Q2 2026</td>
<td>5/6</td>
<td>By Q1 2025, the managing entity will have selected the beneficiaries. The Building Pool shall be split into several yearly application rounds to support a broad distribution of funds among private house owners. The opening of the application rounds shall be announced on the website of the Danish Energy Agency. The subsidy receiver has two years to carry out the energy renovation project, at the completion of which the subsidy is paid out. This shall be to ensure that the funds shall only be allocated for concrete energy renovations. The subsidy pool shall be reduced by 30% if the funds shall not be allocated within the two-year period.</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>By Q2 2026, at least 6,125 energy renovation projects will have been completed.</td>
</tr>
</tbody>
</table>
ABOUT THIS STUDY

This Study assesses the buildings-related elements of the National Recovery and Resilience Plans (NRRPs) in 18 Member States: Austria, Belgium, Bulgaria, Croatia, Czechia, Denmark, France, Germany, Greece, Hungary, Ireland, Italy, Latvia, Poland, Romania, Slovakia, Slovenia and Spain. 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.

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

1 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.

<table>
<thead>
<tr>
<th>Normalised* points range</th>
<th>Score</th>
<th>“Play button” Infographic</th>
</tr>
</thead>
<tbody>
<tr>
<td>2.5 – 4.0</td>
<td>“Not addressed”</td>
<td>![Image]</td>
</tr>
<tr>
<td>4.1 – 6.3</td>
<td>“Needs improvement”</td>
<td>![Image]</td>
</tr>
<tr>
<td>6.4 – 8.5</td>
<td>“Strong”</td>
<td>![Image]</td>
</tr>
<tr>
<td>8.6 – 10</td>
<td>“Transformational”</td>
<td>![Image]</td>
</tr>
</tbody>
</table>

* 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.
RENOMATE 2 RECOVER
NINE RECOMMENDATIONS TO MEMBER STATES TO MAKE THEIR RECOVERY PLANS TRANSFORMATIVE

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
3. Improve scheme longevity and impact by crowding in private finance
4. Integrate renovation with heat decarbonisation and apply Energy Efficiency First Principle consistently
5. Embed renovation alongside wider political and socio-economic priorities
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
9. Engage in better monitoring and aggregation of data to measure impact

Extracted from the E3G/Renovate Europe Study on National Recovery & Resilience Plans October 2021