


Renovation wave

Position Paper



The Sustainable Housing Platform (*Platform Duurzame Huisvesting*) is an independent alliance of sector, knowledge and umbrella organisations that is accelerating and scaling up the transition to sustainable non-residential buildings, using their knowledge, dedication and the power to effect change.

Proposal for smart and data-driven acceleration of CO2 reduction in non- residential buildings in the Netherlands by 2030

Renovation Wave Position Paper

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Summary

This Sustainable Housing Platform (Platform Duurzame Huisvesting) position paper sets out a proposal for a multi-annual programmatic approach to accelerate the process of making non-residential buildings more sustainable, in an efficient and future-proof manner. The Sustainable Housing Platform contains eight concrete proposals to accelerate the existing implementation paths of the Climate Agreement for the Dutch non-residential building sector. This integrated approach forms part of the Netherlands' response to the Renovation Wave, recently launched by the European Commission. The first two proposals explore our ambitions for the sustainability of non-residential buildings. This is followed by four proposals for an approach to make this vision a reality. Lastly, we discuss two points that require additional attention in order to successfully roll out the programmatic approach proposed.

Ambition	<ol style="list-style-type: none"> 1. Speed up the implementation of cost-effective measures to reduce CO₂ in non-residential buildings 2. Harness synergy opportunities by adopting an integrated, effective and future-proof approach
Approach	<ol style="list-style-type: none"> 3. Make data-driven sustainability the standard 4. Analyse data for smart sustainability 5. Subsidise support and awareness (but only if implemented on time) 6. Make off-balance-sheet financing accessible with optimal leverage
Points for attention	<ol style="list-style-type: none"> 7. Provide sufficient funding to make community buildings more sustainable 8. Provide enough trained professionals

Together with all stakeholders, the platform seeks to develop this proposal into a multi-year acceleration programme for sustainability in non-residential buildings (versnellingsprogramma verduurzaming utiliteit) that attracts broad support. This acceleration programme will serve as a vehicle to implement the non-residential section of the Renovation Action Plan, which submits a report to the European Commission on the progress of sustainability every two years. The Sustainable Housing Platform is pleased to serve as the coordinator of this programme. It will periodically coordinate with stakeholders on progress, support agile cooperation on specific acceleration actions with a firm focus on results and, where necessary, promote additional acceleration actions. Since the Sustainable Housing Platform is represented on the Built Environment Steering Panel (Regietafel Gebouwde Omgeving), the programme can be firmly embedded in the broader programmatic implementation of the Climate Agreement.

Introduction

The Netherlands aims to be a European leader in the fight against global warming. To become climate-neutral by no later than 2050, we are raising the 2030 target in the Climate Act (Klimaatwet) to at least a 55% reduction in CO2. We are firmly committed to this goal and we will take additional steps to achieve it if necessary.

[Quote from the coalition agreement 'Looking out for each other, looking to the future'.]

Recent developments at a national and European level are influencing the pace at which the non-residential building sector will need to become more sustainable over the coming years. In the Dutch Government's Climate Agreement¹, the parties involved had already committed to an additional reduction of 1 Mt of CO2 by 2030 in existing non-residential buildings. This was a direct interpretation of the national target of a 49% reduction for the sector. This ambition has been increased further since the EU Climate Act (2021) took effect, which raised the target for EU countries to reduce their CO2 emissions by 55% by 2030. Part of the European Green Deal is the Renovation Wave², which Member States have to implement nationally. The Renovation Wave offers a significant opportunity for the Netherlands to accelerate and intensify its efforts to implement the Climate Agreement.

The Sustainable Housing Platform is represented on the Built Environment Steering Panel and, as such, it is closely involved in the implementation of the measures under the Climate Agreement to make non-residential buildings more sustainable.

What is the Sustainable Housing Platform?

We are an independent alliance of sector, knowledge and umbrella organisations working to make non-residential buildings more sustainable faster and on a large scale. Member associations develop tools and instruments together to make the non-residential sector more sustainable, set the agenda and proactively share knowledge. To speed up this process, we need parties from the entire property chain to get involved, show commitment and act collectively. The Sustainable Housing Platform is a serious partner for the market and the government, thanks to our broad cross-sector representation in the property chain, from client to end-user. Our members include construction, operation & maintenance and management companies, investors and building-facilities managers. As such, they are taking collective responsibility and combining their knowledge and power to effect change for a sustainable and future-proof living environment and an accelerated energy transition.

¹ Dutch Government. *Climate Agreement*. (28 June 2019). <https://www.klimaatkoord.nl/gebouwde-omgeving>.

² European Commission. *A Renovation Wave for Europe - greening our buildings, creating jobs, improving lives*. (14 October 2020). <https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX%3A52020DC0662>.

Ambition

Proposal 1: Speed up the implementation of cost-effective measures in non-residential buildings

The Sustainable Housing Platform proposes a multi-annual programmatic approach from 2022 to 2030 to accelerate as much as possible of the 3.2 Mt of CO₂ reduction in the Dutch non-residential sector. This would be done in an efficient and cost-effective manner, with sights set firmly on the future.

The 49% CO₂ reduction target under the Climate Agreement has also been embraced in the non-residential construction sector. More specifically, this means a total reduction of 3.1 Mt of CO₂ by 2030. The agreements already made provide for a potential reduction of 1 Mt of CO₂³. The remaining 2.1 Mt of CO₂ reduction can be achieved through cost-effective measures. These costs of these measures will be recovered within the economic life of an object. The platform's ambition is to achieve the CO₂ reduction of 3.1 Mt⁴ for non-residential buildings, including offices that come under energy label class C, by implementing all cost-effective measures.

For this, we require:

- a clear direction and pathway sectoral road maps (already developed by sectors of society) and the Final Standard 2050 (currently being developed by the Ministry of the Interior)
- an accelerated phase-out of non-residential buildings with poor energy performance
- the harmonisation of legislation and regulations (currently being developed by the Ministry of the Interior)
- a reduction of administrative expenses
- subsidies for unprofitable actions.

Proposal 2: Harness synergy opportunities by adopting an integrated, effective and future-proof approach

The Sustainable Housing Platform proposes to combine funding for the Renovation Wave to reduce CO₂ as far as possible with actions in other areas such as health, circular economy, biodiversity and climate adaptation.

Sustainability is about much more than reducing CO₂ alone. It is also about health, circularity, biodiversity and climate adaptation. Tying in with ambitions in other areas creates better, integrated solutions with enormous added value, even if it increases the individual costs for energy or maintenance. For example, improving the indoor climate can lead to higher energy and maintenance costs, but research by Maastricht University shows that a healthy indoor climate reduces staff absences and, in turn,

³ TKI Urban Energy. *Knowledge document on increasing the sustainability of non-residential buildings*. (30 June 2020). [https://www.topsectorenergie.nl/sites/default/files/uploads/Urban%20energy/publicaties/Kennisdokument%20verduurzaming%20utiliteitsbouw%20\(007%20openbaar\).pdf](https://www.topsectorenergie.nl/sites/default/files/uploads/Urban%20energy/publicaties/Kennisdokument%20verduurzaming%20utiliteitsbouw%20(007%20openbaar).pdf)

⁴ Brink. *2030 target impact analysis*. (13 April 2020)

costs⁵. An integrated approach will reduce the Total Cost of Ownership compared to an isolated approach in each area.

Drawing up standardised renovation passports will support the development of phased inclusive building renovations. Smart multi-year phasing that ties in with the time when a building naturally becomes due for renovation is essential to ensuring that the measures to improve sustainability are cost-effective. This applies at both a micro level (for each company) and macro level (for the Netherlands as a whole). Integrated sustainability – encompassing health, circular economy, biodiversity and climate adaptation – must be planned carefully to prevent one renovation step from obstructing the next necessary steps. Building owners and investors will need a renovation passport to take advantage of these synergy opportunities as part of the Renovation Wave.

Approach

Proposal 3: Make data-driven sustainability the standard

The Sustainable Housing Platform proposes developing the Non-Residential Actual Energy Consumption Data System (Datastelsel Werkelijk Energieverbruik Utiliteit) into a Data System for Increasing Sustainability in Non-Residential Buildings (Datastelsel Verduurzaming Utiliteit). This latter system would include additional links to relevant data sources for indoor climate, circularity (including residual value indication), climate adaptivity and nature inclusivity. Full, up-to-date reporting from the new system bring added value to the energy label and make it easier to drive sustainability through data.

A data-driven programmatic approach is vital to making non-residential buildings future-proof. To achieve this at a national level, a development programme is required to help property-sector organisations undergo digital transformation. The purpose of this kind of programme is to set out the actions to achieve the predetermined goals, from an integrated perspective. In this way, property-sector organisations are included in process of becoming more sustainable in a data-driven way, encouraging them to achieve concrete results. This can be done by sharing knowledge and expertise and providing targeted support. We work using the Plan, Do, Check & Act method to achieve continuous improvement.

Moreover, there is a growing need to unlock an ever-increasing amount of data, which is now available from a multitude of sources, so we can carry out complex analyses efficiently. This will make it increasingly possible to make integrated decisions and to tackle aspects such as CO₂ emissions, indoor climate, toxicity and the use of materials ahead of time.

As an implementation of the Climate Agreement, the Sustainable Housing Platform and the Netherlands Enterprise Agency (RVO) have started to develop a Non-Residential Actual Energy Consumption Data System (DWEU), which will go live in 2022. This will make the energy and building data available more accessible and easier to share securely. The system will make the actual energy consumption per m² more transparent – in accordance with the Actual Energy Intensity Indicator protocol developed by the market – for individual companies and institutions as well as sector

⁵ Palacios, Eichholtz, & Kok. Moving to productivity: The benefits of healthy buildings. *PLoS ONE* (8) (6 August 2020). <https://doi.org/10.1371/journal.pone.0236029>.

organisations. It will also tie in with the measuring methods and sector bench marks⁶ that are being developed from the sectoral road maps.

A healthy indoor climate is essential for our vitality and productivity

Europe is also asking us to turn our attention to the indoor climate, besides energy performance. The Foundation for Indoor Climate Technology (Stichting Binnenklimaattechniek), founded by Indoor Climate Netherlands (Binnenklimaat Nederland) and the Dutch Society for Building Services (Technische Vereniging voor Installaties in Gebouwen, TVVL), has developed the Indoor Climate Guidelines, together with the Central Government Real Estate Agency (Rijksvastgoedbedrijf) and leading industry associations. These documents serve as best practice for design, installation, operation and maintenance instructions for climate installations in the non-residential sector, with the aim of improving the indoor climate, optimising energy consumption and setting a high quality standard for installations. The Schedule of Requirements for Healthy Offices (Programma van Eisen Gezonde Kantoren) contains performance requirements for the indoor climate, divided into the categories of Air, Climate, Light and Sound, which are in turn divided into classes C, B and A. The Indoor Climate Label is the output of the Schedule of Requirements for Healthy Offices and the Indoor Climate Guidelines, helping building owners to achieve a healthy indoor climate clearly and concisely. Energy saving, quality and indoor climate go hand in hand in this respect.

Proposal 4: Analyse data for smart sustainability

The Sustainable Housing Platform proposes that an annual statistical data analysis is carried out from the Data System for Increasing Sustainability in Non-Residential Buildings.

Broadening the data system will make it easier and more cost-effective to improve the integrated sustainability of non-residential buildings. As a result, commercial and community building owners will find it easier to:

- benchmark the sustainable performance of their buildings and determine how their building performs against other comparable ones;
- share this benchmarking with authorities to minimise the administrative burden for the building owner and enforcement costs for the authorities;
- share complete and up-to-date datasets with their advisors and implementing parties to make their sustainability projects as cost-effective as possible.

This benchmarking requires the data obtained from the Data System for Increasing Sustainability in Non-Residential Buildings to be statistically analysed continuously. This analysis will also provide valuable information and insights for reporting to the European Commission every two years, as required under the EPBD. In addition, policymakers can draw on this to optimise their policy instruments. The market can also coordinate and jointly develop algorithms that can be applied to the data available (including at an international level), where possible and desirable.

⁶ Example https://dashboards.cbs.nl/v2/energieverbruik_sportvastgoed

Proposal 5: Subsidise support and awareness

Platform Duurzame Huisvesting stelt voor om in nauwe samenwerking met sectororganisaties een subsidieprogramma te ontwikkelen waarin ontzorging en awareness worden gesubsidieerd. Daarmee kunnen 100.000 bedrijven en instellingen in de periode 2022-2030 worden bereikt. Dit programma zal aansluiten op bestaande sectorale expertisecentra (zoals Ruimte OK voor het onderwijs en kinderopvang en provinciale loketten voor gemeentelijk vastgoed), waardoor deze expertisecentra verder worden versterkt. Voor een gezonde focus op realisatie dient de ontzorging alleen gesubsidieerd te worden bij tijdige realisatie van de kosteneffectieve maatregelen. Als realisatie langer dan twee jaar uitblijft terwijl wel een kosteneffectief CO₂-reductiepotentieel is aangetoond, dient de subsidie door de onderneming of instelling te worden terugbetaald.

Although many energy-saving measures can be implemented cost-effectively, investments are often delayed by companies and institutions due to practical obstacles. This is usually a combination of lack of time, knowledge and money. Entrepreneurs and institution managers need to be supported in overcoming their concerns, in a way that involves their implementing parties, advisors and financing agencies.

With the proposed subsidy for support and awareness, companies and institutions can use instruments with a guaranteed high level of quality when planning, budgeting, financing, contracting, delivering and monitoring sustainability projects to reduce CO₂. What is also important in this context that opportunities for synergies are harnesses, such as improving the indoor climate (user appreciation), nature-inclusive climate adaptivity and circularity.

Proposal 6: Make off-balance-sheet financing accessible with optimal leverage

The Sustainable Housing Platform proposes setting up a public-private fund to provide accessible off-sheet-balance financing for projects to make non-residential buildings more sustainable. Public first-loss guarantee capital, in an optimal leverage with private capital, will lead to a multiple of investments in sustainability measures.

Linking sustainability to making buildings climate-proof and circular can increase the value of buildings. The interaction between a building and its surroundings can improve its overall setting. Examples of this include smart buildings with blue-green roofs that regulate local area water management in conjunction with the water authorities, or green roofs and facades that provide natural cooling for buildings and the surrounding area. Raising awareness among building owners, investors, banks and the government with regard to the added value for the building, its surrounding area and users, will boost demand for inclusive solutions and create future-proof non-residential buildings. In addition to awareness campaigns and demand stimulation, a financial valuation of the additional benefits is needed to get the most out of these synergy opportunities as part of the Renovation Wave.

When it comes to off-balance-sheet financing of integrated sustainability projects, the securities are too limited and the risks too high for private financing agencies to cater to this need on a large scale without public guarantee capital. This is even more true for the more ambitious and often longer-term sustainability projects. Public first-loss guarantee capital, however, can do away with this obstacle.

Standard for improving sustainability with guarantees and smart financing

'Improving sustainability can and has to be made much easier! That's why, in 2021, branch organisations Techniek Nederland, Bouwend Nederland, NVDE, VNO-NCW and MKB-Nederland joined forces to form the Saving Guarantee Foundation (Stichting BespaarGarant). Together, they are currently rolling out a standard method for making buildings more sustainable with a technical performance guarantee and, where desired, off-balance-sheet financing. It is a decisively open standard, so all qualified building and installation companies, energy consultants, banks and investment funds can use it.'⁷

'Many companies and institutions want to make their buildings sustainable off the balance sheet, without sacrificing investment in their core business. That's why the foundation is currently developing an energy-saving-as-a-service model together with the Dutch Government (Ministries of Economic Affairs and Climate Policy and of the Interior) and several investment funds. A public-private investment fund will invest in your sustainability project (on its balance sheet), charging you a service fee. Your current operational costs for the energy supplied are therefore shifted to operational costs for the energy saved. So, you benefit by retaining the ability to invest in your core activities, because the sustainability project has no impact on liquidity or solvency.'⁸

Points for attention

Proposal 7: Provide sufficient funding to make community buildings more sustainable

Failing to provide the necessary additional funding for community buildings will lead to less CO2 reduction than can and must be achieved. Financing community institutions is a political matter, but its potential should not be disregarded in this paper. The proposed programmatic approach would help lower the overall costs of improving sustainability to the extent required.

For community organisations such as educational institutions or care facilities, sustainability often presents a financial barrier. In such case, they are unable to cover the full overall costs of maintaining their property. For the 12 social sectors, the funding currently falls short by €2 to €3 billion per year, calculated based on the sectoral roadmaps. The additional funding required must be found in order to achieve the climate targets for the non-residential sector and comply with legislation and regulations.

⁷ BespaarGarant. Subsidy scheme for making SMEs more sustainable. (4 October 2021). <https://bespaargarant.nl/2021/10/04/subsidieregeling-verduurzaming-mkb/>.

⁸ BespaarGarant. *Improving sustainability while retaining the ability to invest in your core business*. (10 March 2021) <https://bespaargarant.nl/2021/03/10/verduurzamen-en-je-investeringsruimte-voor-kerntaken-behouden/>.

Proposal 8: Provide enough trained professionals

The knowledge needed to make non-residential buildings more sustainable is usually more complex and comprehensive than for residential buildings; notably, it requires great digital skills. The Sustainable Housing Platform proposes to extend the People Make the Transition (Mensen Maken De Transitie) programme to the non-residential sector, so that there are enough trained professionals available with specific knowledge to help scale up sustainability as planned in these buildings. The specific need for knowledge and education is based on: 1) the engineering and successful application of complex installations including system engineering, 2) industrialisation in the existing stock of buildings, 3) standardisation of processes and 4) extensive digitalisation and, in turn, the data-driven component of sustainability in the built environment.

As part of the local approach to the sustainability of housing, various branch organisations, trade unions, educational organisations and the Dutch Government launched the People Make the Transition programme in 2019⁹. The programme focuses on arranging for sufficiently trained professionals to be able to do the work. The programme has three pillars: (1) retraining professionals from dwindling sectors, (2) further training of current professionals and (3) recruitment into technical education. The new insights obtained from the energy transition will be given a prominent place in the Lifelong Development (Leven Lang Ontwikkelen) programme. Sustainability of non-residential buildings must also feature heavily in this programme, which currently focuses on the sustainability of residential buildings.

Labour market and training in the Climate Agreement

'Labour market and education are key factors in the transition to a sustainable economy. Many tens of thousands of extra workers are needed to meet climate targets. At the same time, jobs in traditional industries may be lost, and many existing positions will see changes. This requires the workers affected and the techniques and work processes that go with them to develop.

To ensure the measures under the Climate Agreement are affordable, garner support and can be implemented quickly, there must be new opportunities for the economy and employment, in such a way that as many people as possible can benefit from them. This is only possible if we pursue long-term, proactive policies collectively to develop the labour market.

The agreements under the 'Labour market and education' section of the Climate Agreement cover what is needed for this. The agreements sometimes refer specifically to a sector or a region, made at a time when learning and innovation are a priority and where everyone can get involved. This goes hand in hand with improving information about labour markets, properly structuring new and existing jobs and absorbing any social risks in the event of imminent job losses.

If there is success in making the energy transition more attractive to work and invest in, with a targeted and proactive policy for the labour market, then this will create opportunities for the Netherlands. First of all, there will be a greater opportunity for a more sustainable future, but the opportunities for an economy with clean, secure and future-orientated jobs will increase.¹⁰

⁹ SER. *People Make the Transition: a declaration of intent on the labour market and education within a local approach*. (April 2019).

¹⁰ Dutch Government. *Climate Agreement: Labour market & education (Chapter D4)*. (28 June 2019). <https://www.klimaataakkoord.nl/themas/arbeidsmarkt-en-scholing>

Acceleration programme for sustainability in non-residential buildings

The Sustainable Housing Platform proposes working on developing this proposal in consultation with all stakeholders into a broadly supported multi-year acceleration programme for sustainability in non-residential buildings. As the programme coordinator, we will periodically coordinate with stakeholders on progress, support agile cooperation on specific acceleration actions with a firm focus on results and, where necessary, promote additional acceleration actions. Since the Sustainable Housing Platform is represented on the Built Environment Steering Panel (Regietafel Gebouwde Omgeving), the programme will be firmly embedded in the broader programmatic implementation of the Climate Agreement.

In order to strengthen the acceleration programme for its launch, the Sustainable Housing Platform will further develop this position paper into a turn-key programme structure containing:

- Planning: setting out objectives, target groups, milestones and actions
- Organisation: working out multi-stakeholder cooperation, agile cooperation method and specific staffing
- Multi-annual budget: fully documented subsidy/funding applications that can be submitted to the Dutch Government and relevant EU programmes and schemes.



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