

THE VALUE OF SUSTAINABILITY

IMPACT ON CLIMATE, ENERGY COSTS
AND LIVING COMFORT



INTRODUCTION

Sustainability of the Dutch housing stock is crucial to achieving climate goals. In addition to investing in sustainable new construction, institutional investors can also make a significant contribution by making existing homes more energy-efficient. By renovating outdated homes with poor energy labels, not only is CO₂ emissions reduced, but the affordability and quality of the housing stock are also improved. This creates societal impact on multiple levels.

The business case for sustainability is also becoming increasingly strong. Although the investments are high, sustainable homes offer opportunities for higher rental income and better indirect returns. This effect is expected to increase due to stricter regulations.

In this paper, we discuss the opportunities and considerations for institutional investors to contribute to a more sustainable Dutch housing market.



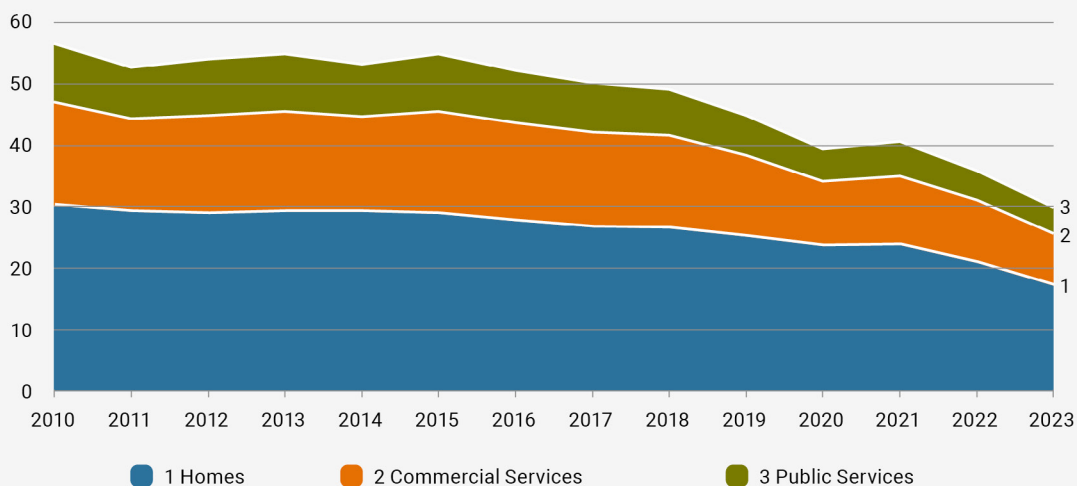
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1. THE CENTRAL ROLE OF HOMES IN CLIMATE CHANGE

The climate challenge in the Netherlands is significant. By 2030, greenhouse gas emissions must be 55 percent lower than in 1990, and by 2050, the Netherlands aims to be climate neutral. These commitments were made in response to the Paris Agreement. The built environment accounts for 38 percent of Dutch CO₂ emissions, with the majority of emissions caused by energy consumption. Within the built environment, the housing sector, with a stock of 8.2 million homes, is the largest absolute source of CO₂ emissions. In total, Dutch homes emit 17.1 million tons of CO₂ due to the consumption of gas, electricity, and district heating, which accounts for 57 percent of the emissions from the entire built environment.

Figure 1: CO₂ emissions from the built environment (Mton CO₂)



Source: RVO (2025), edited by Achmea Real Estate

Sustainability in the private rental sector is lagging behind the targets. There is a need for acceleration to meet the goals set out in the Paris Agreement and thus become “Paris Proof.” It is logical to start by focusing on the sustainability of the worst-performing homes with a label D or lower, as these offer the greatest potential for improvement.

“Homes account for 57 percent of the emissions from the entire built environment.”

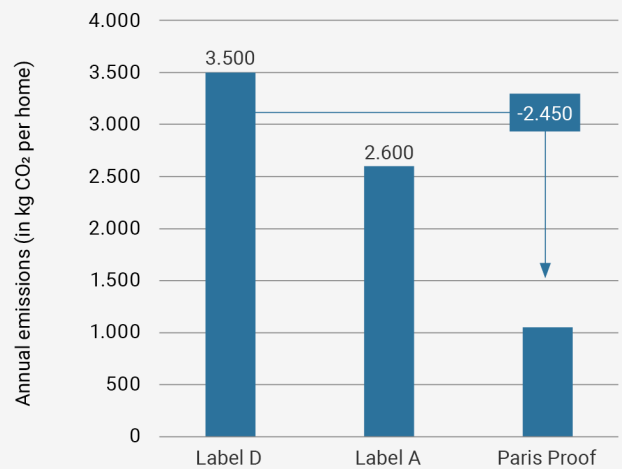
Significant reduction in emissions

Most Dutch homes are heated with a gas-fired central heating system. With an emission of approximately 1.8 kg CO₂ per m³, gas is the largest source of emissions in homes. The rise of solar panels and wind turbines increasingly provides electricity as renewable energy, a trend expected to grow in the coming decades. Additionally, six percent of Dutch homes are heated using district heating, which also has a relatively low emission level. The climate agreement states that by 2030, 70 percent of electricity should be generated sustainably, making the energy mix greener.

When making homes more sustainable, it's essential to start with insulation improvements, allowing the home to eventually disconnect from gas. This can reduce the energy needs of a home by approximately 30-40 percent, starting from a D label. The home can then be converted from gas heating by installing an electric heat pump or, if available, connecting to the heat network. Adding solar panels can also lower electricity consumption. This makes the home Paris Proof, with total energy consumption reduced by up to 75 percent compared to the original D label home.

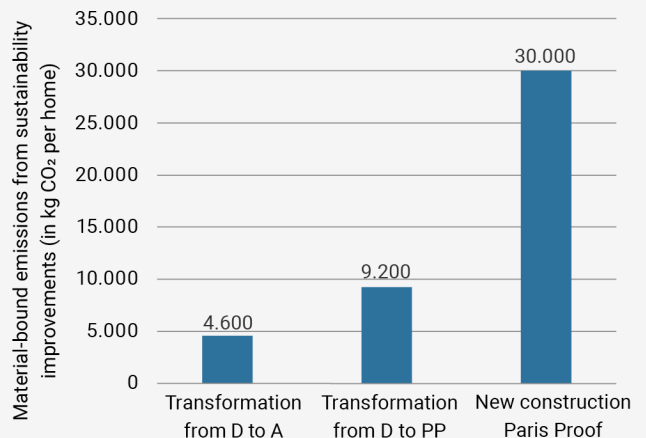
Upgrading a home from a D label to Paris Proof results in a reduction of about 2,500 kg CO₂ per home per year due to lower energy consumption. However, the sustainability measures themselves will cause additional emissions due to the materials and required work, amounting to approximately 9,200 kg of material-bound CO₂ emissions. The reduced emissions from energy consumption will compensate for the material-bound emissions in about four years. By focusing on the use of bio-based materials during the sustainability upgrades, the intervention can also achieve a relatively low carbon footprint, albeit at slightly higher costs. Furthermore, the material-bound emissions for upgrading a D label home to Paris Proof are less than a third of the emissions required for constructing a new home. Therefore, investing in the sustainability of existing homes is highly effective for reducing emissions in the built environment.

Figure 2: Annual emissions (in kg CO₂ per home)



Source: CBS (2025), edited by Achmea Real Estate

Figure 3: Material-bound emissions from sustainability improvements (in kg CO₂ per home)



Source: W/E Adviseurs (2025), edited by Achmea Real Estate

2. INVESTMENT OPPORTUNITIES

In 2024, a quarter of the Dutch housing stock had an energy label of D or lower. In 2010, this share was still 50 percent. The housing stock has therefore already been significantly made more sustainable over the past decade. The average new construction production of around 60,000 homes per year has greatly contributed to this. Additionally, large landlords have made their portfolios more sustainable. There are currently about 850,000 rental homes in the Netherlands with a label D or lower. Generally, these are homes built in the early 1990s or earlier. Of the homes with a D label or lower, over 400,000 are owned by market parties, primarily private investors.

The required investment to make these rental homes more sustainable is expected to run into tens of billions of euros. This is in addition to the substantial investments needed to address the housing shortage.

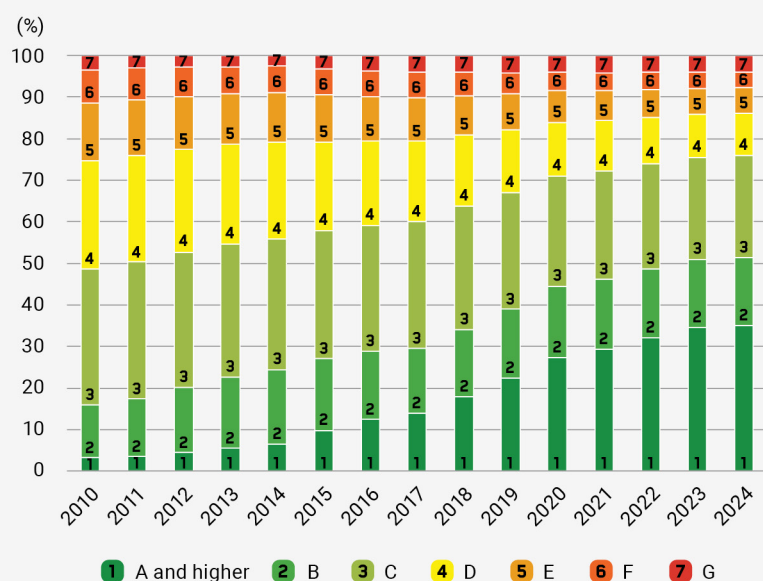
Frontrunners in sustainability

Together with housing corporations, institutional investors have been at the forefront of sustainability for years. Approximately 9 out of 10 homes owned by IVBN members have a label C or higher, and more than half have a label A or higher. In comparison, smaller investors with fewer than 500 homes in their portfolio only have 60 percent with a label C or higher.

In recent years, institutional investors have sold off a lot of non-sustainable assets to other investors or disposed of them through sales to individuals while simultaneously investing in new construction. Additionally, significant investments have been made

in existing complexes to enhance their sustainability. As a result there is an extensive track record of successful sustainability projects has emerged, and a lot of expertise has been built up. Institutional investors can further leverage this accumulated expertise for the existing housing stock. By not only investing in new homes but also focusing on the sustainability of existing homes, institutional investors can contribute to an affordable and sustainable housing stock. Due to the ongoing high demand for rental homes in the Netherlands, the investment risk associated with the underlying residential product is low.

Figure 4: Distribution of energy labels of Dutch housing stock



Source: RVO (2025), edited by Achmea Real Estate

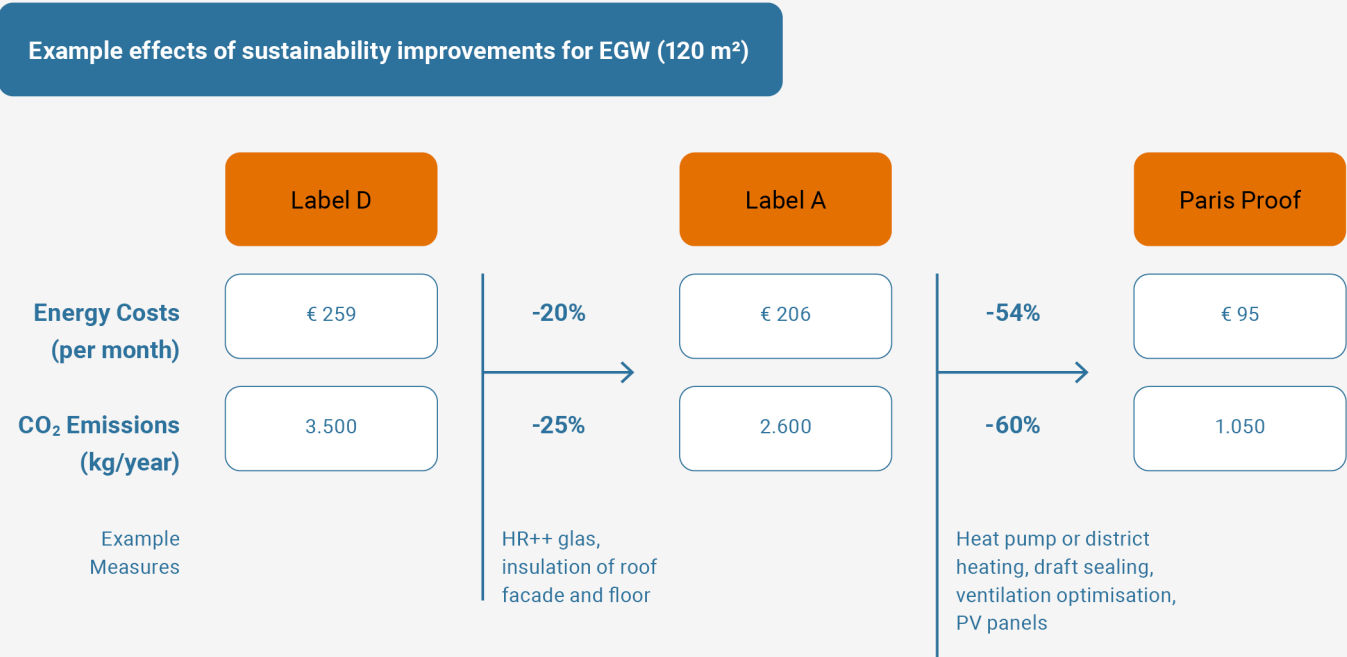


3. INVESTING IN A SUSTAINABLE HOUSING STOCK

Het Making homes more sustainable requires substantial investments. Depending on the ambition level for sustainability and the type of home, costs can exceed €100,000 for upgrading from a D label to Paris Proof, and about half that amount for upgrading to an A label. Costs can thus amount to up to 30 percent of the home’s value. The actual costs are highly dependent on the measures taken and the type of building.

It is important to follow the correct order of measures to avoid unnecessary measures. For example, installing an electric heat pump is not very effective if the insulation of the home is inadequate, as it will not provide enough capacity to efficiently heat the home. The initial measures to take include replacing glass with HR++ glass and improving the insulation of the roof, facade, and floor. Then, the heat source can be addressed by connecting the home to a heat network or installing a heat pump. Ventilation should also be optimized. Although investing in solar panels has become less attractive due to the abolition of the netting scheme, it is still worthwhile to add a limited number of panels based on the electricity needs of the home.

Figure 5: Example effects of sustainability improvements for EGW (120 m²)



Source: CBS, RHDHV (2025), edited by Achmea Real Estate



Paulus Akkermanweide - Leeuwarden

In addition to these sustainability measures, there are also additional costs. Examples of these costs include ecological and asbestos research, tenant support, and permit applications. When a tenant must temporarily vacate the property, there are also moving-out costs. It is possible to receive subsidies for part of the sustainability costs through the SVOH scheme. This involves several thousand euros per home, with subsidies available for each measure taken.

Besides the SVOH, there are also national and local subsidies for specific measures that landlords can apply for. These include, among other things, the installation of heat pumps (ISDE) or costs for preparing for a heat network (SAH). Since maintenance-sensitive components of the home are also addressed during a sustainability project, a renovation will lead to lower maintenance costs in the years following the renovation. Of course, attention to maintenance remains necessary, as even sustainable installations require regular upkeep.

“It is important to maintain the correct order of measures to avoid unnecessary measures.”

4. THE BENEFITS OF SUSTAINABILITY

While the costs of sustainability lie with the property owner, the tenant benefits from lower energy costs. With the same household composition and equal prices, the variable energy costs of a home with a D label will decrease by approximately 25 percent when upgraded to an A label. When upgrading from D to Paris Proof (label A+++), the reduction in costs will even be around 50 percent (source: RHDHV, CBS). This translates to lower monthly expenses of €80 to €140 based on the average energy prices in 2024. Additional benefits can be achieved by utilizing solar panels. Furthermore, homes that are upgraded to Paris Proof will also see a savings of €26 per month in grid management costs, as a gas connection will no longer be necessary. In addition to lower energy costs, households enjoy greater comfort. A well-insulated home has fewer temperature fluctuations, and improved ventilation and updated installations provide more convenience. Additionally, sustainable homes experience less draft and a lower risk of mold, contributing to a healthier living environment. Finally, many sustainability projects will also address other aspects of the home, such as the renovation of bathrooms, kitchens, and common areas, which will further enhance comfort.

Rental income is important for returns

A landlord will want to capitalize on some of the energy savings through an increase in rent. For existing tenants, it is necessary to agree on how much additional rent may be charged after sustainability improvements. It is logical that the (contract) rent will not be increased by more than the energy savings, ensuring that tenants do not face a financial disadvantage.

Currently, within a housing complex, 70 percent of all tenants must agree to the sustainability plans. Therefore, it is crucial to inform and involve tenants in a timely manner regarding sustainability plans to address any potential objections. However, landlords can reasonably expect tenants to agree to a modest rent increase that reflects a portion of the expected energy savings. Consequently, tenants will still benefit in terms of their total housing costs, while also enjoying greater living comfort. When a unit becomes vacant, there are more opportunities to increase the rent. The actual rent increase is related to the rent regime applicable to the property.

Liberalization opportunities in the regulated sector

In the recently established rent regulation, there are more opportunities to increase the rent for social and mid-range rental homes after sustainability improvements. In the new WWS system, which came into effect in mid-2024, more points are awarded for higher EPC labels, resulting in an increase in the maximum reasonable rent. This translates to an increase of approximately €170 per month for upgrading from a D label to an A label, and around €270 for upgrading from D to Paris Proof (A+++), as shown in figure 6.

However, it is important to note that significant rent increases based on WWS points are not possible in all situations. The market rent may be lower, and the rent increase will often only take place upon vacancy. In addition to rewarding good investment behavior, the government has imposed “penalty points” for labels E, F, and G, making these homes less attractive to rent out.

Figure 6: Impact EPC-label in new WWS system (2024)

Label	WWS points		Rental value	
	SFH	MFH	SFH	MFH
A++++	62	58	€ 395	€ 369
A+++	57	53	€ 363	€ 338
A++	52	48	€ 331	€ 306
A+	47	43	€ 299	€ 274
A	41	37	€ 261	€ 236
B	34	30	€ 217	€ 191
C	22	15	€ 140	€ 96
D	14	11	€ 89	€ 70
E	-4	-4	€ -25	€ -25
G	-15	-15	€ -96	€ -96

Source: Rijksoverheid (2025), edited by Achmea Real Estate

If the property falls within the regulated mid-range segment, a higher rent increase can be applied after sustainability improvements. Normally, the rent of a mid-range rental home, which is rented out based on the maximum reasonable rent, would only increase in line with inflation. However, because the maximum reasonable rent will be higher after sustainability improvements, there is an opportunity to increase the

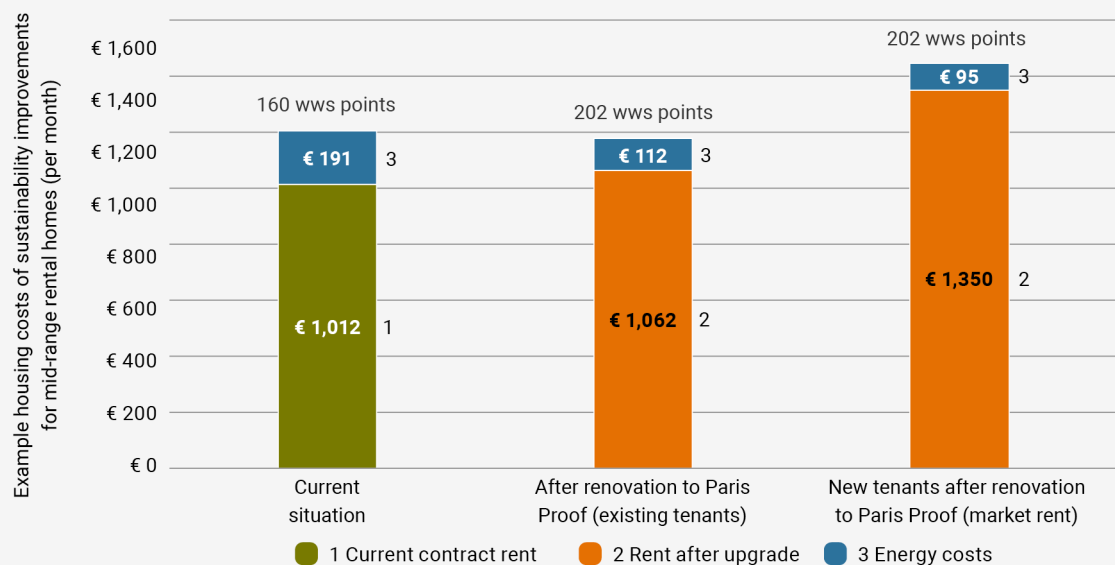
rent by the collective labor agreement (CAO) plus 1 percent. Deze hogere huurgroei zal op termijn voor een This higher rent growth will ultimately lead to a significant improvement in returns. Additionally, a sustainable mid-range rental home may, in some cases, be liberalized due to the extra WWS points. As a result, the property will move into the free segment, allowing a market-conform rental price to be charged upon re-rental.

“Tenants benefit from their total housing costs and gain more living comfort.”

Example of sustainability improvements

The example below illustrates how the sustainability of a mid-range rental home benefits both the existing tenant and the landlord. A mid-range apartment with 160 points is upgraded from a D label to A+++ (Paris Proof). An agreement is made with the existing tenant for a rent increase of €50, but since the energy costs will decrease by €80, the tenant benefits in terms of overall housing costs. Additionally, the tenant enjoys a more comfortable home. Due to the sustainability improvements, the property has gained more WWS points, allowing it to be liberalized when the unit becomes vacant. The rent can then be adjusted to the market rent, providing the landlord with a future-proof property and a better investment outlook. An appraiser will also directly translate the theoretically higher market rent into a higher investment value.

Figure 7: Example housing costs of sustainability improvements for mid-range rental homes (per month)



Source: CBS (2025), edited by Achmea Real Estate

Increasing premium in the free sector

The impact of sustainability on the rent increase for a free sector rental property is harder to observe than for regulated homes. Due to the significant housing shortage in the Netherlands, the demand for rental homes is so high that it is expected that the energy label will have only a limited influence on the rental value. Home seekers, much like in the purchase market, have limited choices when searching for a property. As a result, a less energy-efficient home is accepted more quickly. However, there is an increasing degree of

premium is observable. Recent research based on over 100,000 rental transactions in the portfolios of institutional investors, including those from ARE, shows that energy labels contribute to an increasing premium on rent. According to the study, rental prices for an A++ label property command a premium of 3.7 percent compared to a B label, while a G label shows a discount of 9 percent. These results demonstrate that there is indeed an impact on the rental value due to sustainability improvements.¹

1. Source: RERQ (2024): Split incentives, energielabels en woninghuren

5. THE IMPACT OF SUSTAINABILITY ON VALUES

For landlords investing in the sustainability of their property portfolio, it is essential that the initial investment translates into higher rental income and increased property value. After sustainability improvements, the market rent will rise, allowing for higher rental income upon vacancies. The higher market rent will also have a positive effect on the underlying appraisal value of the property in the short term.

Increasing influence of sustainability on the housing market

In the housing market, we see a clear impact of sustainability on values. Mortgage regulations that came into effect in 2024 allow households to borrow more for more sustainable homes than before. Although this effect seems to have already been factored into property values, the new mortgage rules do provide additional financing options. Research shows that upgrading a home from a D label to an A+ label or better leads to an increase of 11 percent in the value of that same property.² These differences in property values appear to have remained stable over the past few years. Due to the significant housing shortage, homes with an A label and those with a D label have experienced almost identical price developments. Research based on property transactions from 2020 to 2023 indicates that only homes with an F or G label show a significantly lower increase in transaction prices.³

Value effect increasingly visible

The effect of sustainability on investment values is increasingly visible, but it is still insufficient to cover the investment costs. Currently, we see that sustainability investments are reflected in the values for about half of the investment amount. Appraisers are also increasingly incorporating the effects of sustainability into their valuations. For instance, they take into account the additional necessary investments for homes with a very low label, which affects their valuation.

In appraisals for Dutch banks, a sustainability section (DuPa 2.0) has been mandatory since 2024, which outlines the necessary investments for improving the energy label. This makes the requirements for each property more transparent. Additionally, this can increase the valuation difference between sustainable and non-sustainable homes, leading to a greater “brown discount.” Market participants and appraisers are working on the next step of the DuPa, which will be implemented more broadly in the market.

Research also shows that the impact of sustainability on value is increasing. In 2024, a study commissioned by Achmea Real Estate was conducted to assess the impact of sustainability on value. The research, based on 50 renovated residential complexes from Achmea Real Estate, indicates that sustainability appears financially disadvantageous in the short term because appraisers consider the value impact to be limited. Roughly half of the invested amount is directly reflected in the value. As a result, in the first year after sustainability improvements, the relative return is significantly negative compared to the benchmark. However, looking at the long term, sustainable homes perform better than the benchmark.⁴

“We see that appraisers are increasingly incorporating the effects of sustainability into their valuations.”

2. Source: Brainbay (2025): Groen energielabel steeds waardevoller

3. Source: Kadaster (2023): Invloed van energielabels

4. Source: Achmea Real Estate (2024):
Verduurzaming loont op termijn

Recent figures from the MSCI benchmark, based on 620 residential complexes from 2012 to 2024, show that sustainability pays off in the long term. The total return of sustainable residential complexes with an

initial label C or lower is significantly higher than that of complexes with a label C or lower that have not been made more sustainable.

Figure 8: Total return (annual basis) per label upgrade

		Label in 2024			
		C and below	B	A	A+ and better
Label in 2012	A	-	5,80%	6,00%	8,70%
	B	3,90%	6,70%	7,70%	7,40%
	C and below	4,50%	6,80%	6,80%	7,20%

Source: MSCI (2025), edited by Achmea Real Estate



6. REGULATION INCREASES URGENCY

In addition to subsidies for encouragement, regulation is another way to accelerate sustainability. By making improvements, you are well-prepared for future regulations. To achieve climate goals, sustainability improvements must be made.

European regulations lead to new policies.

In 2026, the Energy Performance of Buildings Directive IV (EPBD IV) will come into effect, applicable to all EU countries. The EPBD IV mandates member states to make the built environment more sustainable. Specifically, this means that in the Netherlands, energy consumption in homes must be reduced by 16 percent by 2030 compared to 2020, and by 20-22 percent by 2035. The reduction must occur in the 43 percent of homes with the poorest energy performance. The exact implementation of EPBD IV is up to the member states themselves.

The most concrete measure for the rental market is the “E F G” measure, which stipulates through the Environmental Management Buildings Decree that, starting in 2029, no homes with an energy label lower than D may be rented out. Although there will be no nationwide ban, it gives municipalities the authority to enforce this. While the share of E, F, and G homes is relatively limited at 12 percent of the rental stock, it still represents over 400,000 homes rented out by corporations or market parties. The consequence is that homes with such poor energy labels are expected to be negatively impacted in their valuations. Given the reduction targets in the EPBD IV, it seems logical that after 2029 there will also be restrictions on the rental of, for example, D label homes, but there are currently no policy indications for this.

Objection possibilities for tenants are decreasing

Existing tenants of homes with a low energy label play an important role in the sustainability process. Currently, 70 percent of all tenants must agree to the sustainability plans before the landlord can proceed. In sustainability plans, the starting point should be that the tenants will benefit financially from lower energy

costs. Additionally, comfort increases due to the improved home. However, there is often observable resistance among tenants. Tenants may dread renovations in their homes, feel indifferent, or harbor distrust toward the landlord. It is therefore important for landlords undertaking sustainability projects to involve tenants at an early stage.

In 2024, a legislative proposal titled “Instemmingsrecht en Initiatiefrecht” (Right to Consent and Right to Initiative) has been announced, which will change the minimum approval required for the sustainability of residential complexes. Instead of requiring 70 percent of all tenants, it will now pertain to 70 percent of the tenants who have responded to the proposal. This will facilitate obtaining approval for sustainability plans.

Energy costs increase due to the expansion of ETS

In addition to the EPBD IV, the expansion of the Emission Trading System (ETS-II) to the built environment is a second European measure that will make the sustainability of homes more important. In the ETS, rights for CO₂ emissions are traded, with the number of available rights decreasing annually. While the first ETS focuses on industry, the ETS-II will also address emissions from the built environment.

As a result, emission certificates will also be required for gas emissions in homes. Payment for these will go through energy companies, which will logically pass the costs on to Dutch households. Since the price will be capped until 2029, this will initially amount to an average of €100 per year for homes heated with gas. After 2029, it will depend on the price of the emission certificates, and it is possible that this amount could double.⁵ The result of ETS-II is expected to be an increase in the difference in housing costs between sustainable and non-sustainable homes.

5. Source: ABN Amro (2025), Rabobank (2025)

Figure 9: Legislation

Legislation (proposed start date)	Content	Effect on business case
Affordable Rent Act (2024)	New WWS system provides additional rental income for sustainable homes	Leads to higher rental income for regulated homes
Subsidy Scheme for Sustainability and Maintenance of Rental Homes (SVOH) (2024)	Subsidy opportunity per measure taken for the sustainability of homes	Covers approximately 5-10 percent of the total investment required for sustainability
EPDB IV (2026)	European regulation aimed at reducing energy consumption in buildings	Forces member states to create policies regarding the reduction of energy consumption in homes
Right to Consent and Right to Initiative (2026)	Legislative proposal that limits the 70 percent consent requirement to tenants who respond to the sustainability proposal	Will facilitate approval for the sustainability of residential complexes
Phasing Out EFG (2029)	Adjustments to the Bbl to give municipalities the ability to enforce rental of poor (EFG) labels	Rental homes with poor labels will experience a devaluation
ETS-II (2027)	Emission rights will need to be obtained for the emission of gas by households	Higher gas prices and thus higher energy costs for non-sustainable homes

The various policy measures will increase the necessity of making homes more sustainable and improve the business case. Although the actual direction of Dutch policy will depend on political preferences, it is essential to align with European regulations. In particular, the

EPBD IV will have an impact on policy. The first example is the phasing out of labels E, F, and G. However, to achieve the ambitious targets set in the EPBD IV and the climate agreement, additional measures are necessary.

Sustainability: Single-family homes in Waddinxveen

In Waddinxveen, Achmea Real Estate, on behalf of PME Pensioenfond, has made sustainability improvements to 55 single-family homes built in 1985, upgrading them from a D label to an A+. Among other measures, solar panels, a CO₂-controlled ventilation system, insulating doors, and HR++ glass have been added, resulting in improved environmental performance for the homes. Additionally, a hybrid heat pump has been installed. As a result of the renovation, the living comfort for residents has increased, living costs have decreased, and CO₂ emissions have been reduced by approximately two-thirds. This is one of many examples from the portfolio where sustainability improvements positively impact tenants and enhance sustainability while simultaneously improving the risk-return profile.

7. CONCLUSION

By investing in sustainability, institutional investors can make a significant contribution to addressing the climate challenge. With each sustainable home, thousands of kilograms of CO₂ emissions are avoided annually, contributing to the achievement of climate goals. Additionally, sustainability improvements enhance the quality of the housing stock and lead to more affordable homes through lower energy bills. Therefore, contributing to sustainability aligns well with the socially responsible investment policy of institutional investors.

Sustainability does not immediately lead to a direct increase in value in the short term, but it does contribute to risk reduction and value preservation. Additionally, it helps to lower housing costs. Future laws and regulations, increasing awareness, and financial incentives (such as higher rents for sustainable homes) are expected to further strengthen the business case for sustainability. As a result, sustainability will increasingly pay off financially.

A significant challenge for sustainability is the business case. Due to the necessary large investments in the property, sustainability initially has a negative impact on returns. However, the returns on sustainable properties improve quickly and can even lead to outperformance in the long term. Due to regulations and rising energy prices, the business case is expected to improve further in the future. Moreover, there is increasing evidence that the values of sustainable homes are rising faster than those of less sustainable homes, a trend expected to continue in the coming years. New regulations will increase the urgency for sustainability improvements. By investing in the sustainability of Dutch homes, institutional investors can play an important role in enhancing the housing stock. Finally, investing in sustainability aligns well with the impact policy of institutional investors and their goals to combat climate change.



COLOPHON

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