Triodos Bank's Blueprint for Impact Measurement

Pioneering Impact Finance in Energy and Housing

Triodos Bank

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Introduction

The objective of this report is to inform and educate stakeholders—customers, investors and peers—about how we measure the impact created through Triodos Bank's financing activities. Not only do we aim to demonstrate the positive outcomes generated by our financing initiatives rooted in sustainable values and aligning with our mission to make money work for positive, social, environmental and cultural change. We also intend our approach to impact measurement to be a blueprint for other organisations.

This report reflects our commitment to transparency and goes beyond regulatory sustainability disclosures, such as the Corporate Sustainability Reporting Directive (CSRD). The quantified metrics presented here illustrate how our financial choices lead to meaningful social, environmental and cultural change.

We currently focus on five essential transitions: food, resources, energy, societal and wellbeing. We collaborate closely together with mission-driven entrepreneurs, who only qualify for financing if they meet our strict sustainability standards.

Understanding impact involves recognising the long-term, transformative effects of our financing activities. It encompasses a complex interplay of inputs, outputs and outcomes that contribute to broader systemic change. This report clarifies what impact means in the context of Triodos Bank and highlights our approach to measuring and managing it effectively.

This report is not just a summary of financial metrics; it tells the story of our pioneering role in impact finance, with examples from the energy and housing sectors. By showcasing our efforts to mitigate negative impacts while enhancing positive ones, we aspire to inspire stakeholders to embrace sustainable practices. Ultimately, we are committed to empowering society to recognise that meaningful change is possible when finance aligns with values. The tangible results provide our financing teams with insights to further steer our impact initiatives.

Our vision and mission

We believe in the transformative power of money. We are a values-based bank enabling people to use money consciously to create a healthy society with human dignity at its core. We envision a world where people can thrive within planetary boundaries. To achieve this deep systemic change, we exclusively focus our financing on five transitions: food, resources, energy, societal and wellbeing.

As a bank, we embrace transition thinking as a key driver of systemic change, recognising that behaviour, finance and policy must align to achieve real transformation.

Inspired by social tipping points, we understand that large-scale shifts happen when a critical mass of individuals and organisations adopt new, sustainable norms.

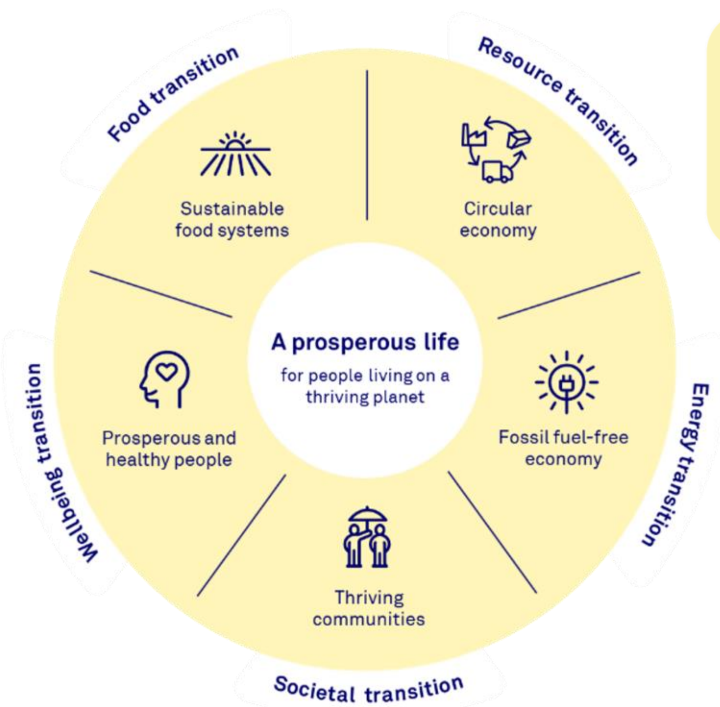

Figure 1: Triodos Bank's transition themes and activities

We actively contribute to these shifts by financing initiatives that challenge the status quo, engaging with stakeholders to accelerate change and advocating for policies that reinforce sustainable transitions. We seek to be a catalyst for a regenerative economy that balances environmental, social and financial wellbeing.

Triodos Bank has set targets on the financed greenhouse gas emissions and restore biodiversity across its lending and investment portfolios.

Change Finance
We aim to influence the financial sector and the shape of the economic system at national, EU and international level to become more sustainable, diverse and transparent.

Finance Change
Our focus on impact dictates which sectors we finance and how we finance them. In our case, that means only financing the entrepreneurs and enterprises that create positive change. Our financing activities are focused on accelerating five transitions.

How we create impact

At Triodos Bank, we aim to accelerate transitions by utilising a diverse array of financial instruments, and we engage with mission-driven entrepreneurs at various stages of their development. In our impact assessment of new clients, each loan or investment is screened against our rigorous minimum standards, applying strict exclusion criteria on sectors, activities and organizations that potentially can have a negative impact on people and the environment. Secondly, we look at how the financed activities contribute to accelerating transitions. Our value creation model provides a structured approach to impact management, demonstrating how financial and non-financial capital can drive meaningful change across stakeholders. At its core, this model highlights our contributions to systemic change through the five transition themes.

A key differentiator of our impact strategy is **financial additionality**—ensuring our financing reaches underfunded sectors that play a crucial role in sustainability transitions. Many pioneering projects in renewable energy, circular economy solutions and social impact struggle to secure capital due to perceived risks or unconventional business models. We bridge this gap by going the extra mile to make these initiatives financeable, working closely with impact-driven entrepreneurs to structure deals that align with their mission, ensure long-

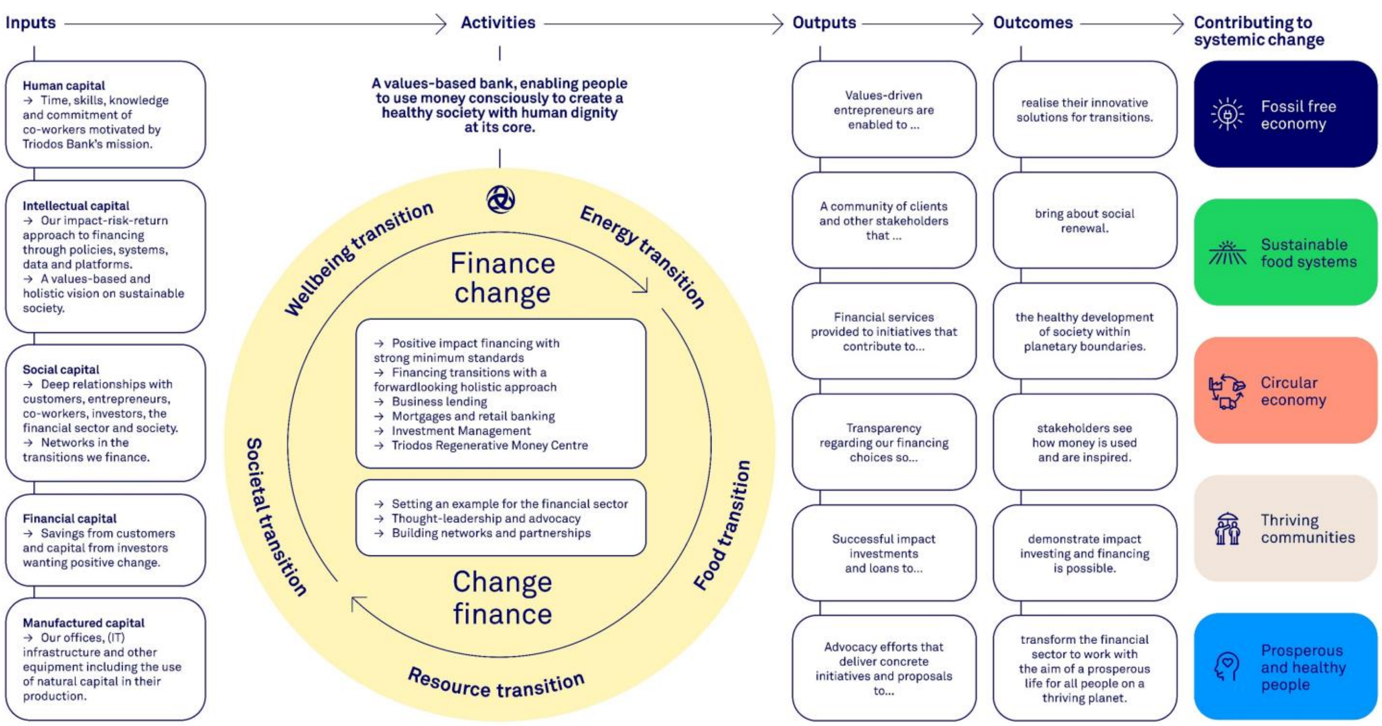

Figure 2: How we make money work for positive change

term viability and deliver a decent return.

Beyond providing capital, our **engagement approach amplifies impact.** We actively collaborate with our clients to strengthen sustainability performance and align operations with transition pathways. We also engage with industry peers and policymakers, advocating for regulatory frameworks that reinforce sustainability. This approach acknowledges that systemic change requires more than financial support—it demands sustained collaboration, adaptation and pressure on existing structures to shift the system towards a more regenerative economy.

From financial commitments to systemic impact

We incorporate transition thinking into our financing decisions, which helps us understand and manage complex societal changes. By using this approach, we recognise that significant change occurs when financial support drives progress towards sustainability. Although it can be difficult to measure the specific impact of our investments, we include qualitative assessments in our evaluation process to ensure that our financing consistently pushes the boundaries of what is possible.

We exemplify how a financial institution can lead by example—showcasing successful sustainable initiatives that inspire broader industry change. Our dual focus on **financial additionality and systemic change** strengthens our role as a frontrunner in sustainable finance, demonstrating that financing guided by values is not only possible but essential for creating a regenerative future.

We are committed to transparency in our financing decisions, ensuring our community understands the impact of our financing. We have always publicly shared the organisations we finance, highlighting their role in driving positive impact. Since 2018, we have measured and reported on the outputs and outcomes of our financing, demonstrating how our support accelerates systemic change. Additionally, our investment funds publish annual impact reports and comply with Sustainable Finance Disclosure Regulation (SFDR) requirements for sustainable investments. For further details, please explore our impact-related publications.

- 2024 Annual Report
- Impact Report 2023 | Our impact is crystal clear – published in April/May
- Know where your money goes

A key example of our advocacy is the **Goodbye to Fossil Fuels** initiative, where we actively engage with stakeholders and policymakers to accelerate the shift away from fossil fuel dependency. Beyond financing, we are driving the conversation on sustainable finance by advocating for policies that support a fossil-free future. This initiative reflects our commitment to not only funding the transition but also shaping the broader movement towards a regenerative economy.

How we steer on impact – Climate and biodiversity targets

We integrate impact management at the heart of our financial decisions, ensuring that every loan and investment contributes to accelerating transitions. By applying transition thinking, we assess the broader context of our financing, recognising that meaningful impact extends beyond direct outputs to long-term environmental and social outcomes. This approach includes close collaboration with mission-aligned entrepreneurs, stringent sustainability criteria and ongoing engagement with stakeholders to accelerate positive change.

Measuring impact, as part of impact management, serves as both a diagnostic tool and a strategic guide. We do not view impact management merely as a quantitative exercise but as a mechanism to inform, refine and enhance our financial decisions. Climate and biodiversity targets are embedded in our financing strategy, directing capital towards projects that mitigate emissions, restore ecosystems and promote circular resource use. The impact calculations—particularly regarding avoided negative environmental impacts related to climate change, air pollution and water pollution—provide transparency on how financing decisions align with systemic change. By combining measurement with active engagement, we ensure that our financial flows support transformative change while continuously refining our approach to maximise positive impact.

For further details, please see Our climate and nature impact chapter in our Annual Report 2024 – 2024 Annual Report

Triodos Bank commits to financing €500 million in nature-based solutions

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Our impact measurement journey

This report marks a significant milestone in our journey of impact measurement and transparent reporting. The objective is to inform and educate stakeholders—customers, investors, and peers—about the positive outcomes generated by our financing decisions rooted in sustainable values. The scope of this initial report is limited to calculating the impact of our financing in solar and wind energy generation, battery storage, and retail mortgage loans.

It lays the groundwork for our ongoing efforts to demonstrate the unique value of Triodos Bank and how we stand apart from the traditional financial sector. This report reflects our commitment to transparency, going beyond regulatory sustainability disclosures like CSRD by quantifying the tangible impacts of our financing activities.

Our ambition is not solely to measure impact but to manage it. Impact measurement is a tool we use to improve our management of impact.

Why measure impact

At Triodos Bank, we embrace demonstrating that financing a sustainable economy is essential. By highlighting the impacts of our financing decisions, we aim to inspire others to join us in creating a sustainable future. Our efforts to transform intentions into measurable results allow us to celebrate successes, engage stakeholders, and identify new opportunities for meaningful impact. While we aim to finance transitions and systems change, these are not directly measurable—we can only measure the current system and its outcomes. Impact calculations help us understand our financial additionality by quantifying the unique outcomes generated by our financing and identifying underserved areas that benefit from our support. This commitment to quantification reinforces our dedication to using finance as a force for positive change.

We recognise that some effects—like our additionality and certain qualitative contributions to societal transitions—may not be quantifiable. Therefore, we combine quantitative insights with qualitative information to improve decision-making and demonstrate our value. We measure outputs and outcomes, but our focus goes beyond these metrics, incorporating deeper engagement, values-based decision-making, and alignment with long-term transitions. Our focus is not merely on reducing numbers to zero; it's about proving that financial decisions aimed at creating positive change can catalyse systemic transformation.

Understanding both negative externalities and positive impacts is crucial for informed decisions. Our impact calculations guide strategic investment and lending decisions, ensuring capital is allocated effectively to projects that generate positive social and environmental outcomes. While we measure specific indicators, we develop policies and strategies that steer our financing towards accelerating the five transition themes and reducing negative impacts.

This analysis will serve as the cornerstone of our advocacy, reinforcing our message to regulators about the importance of mandating the reporting of negative impacts and revising climate targets for a more sustainable future.

This analysis covers about 45% of the total number of loans to customers from our whole portfolio.

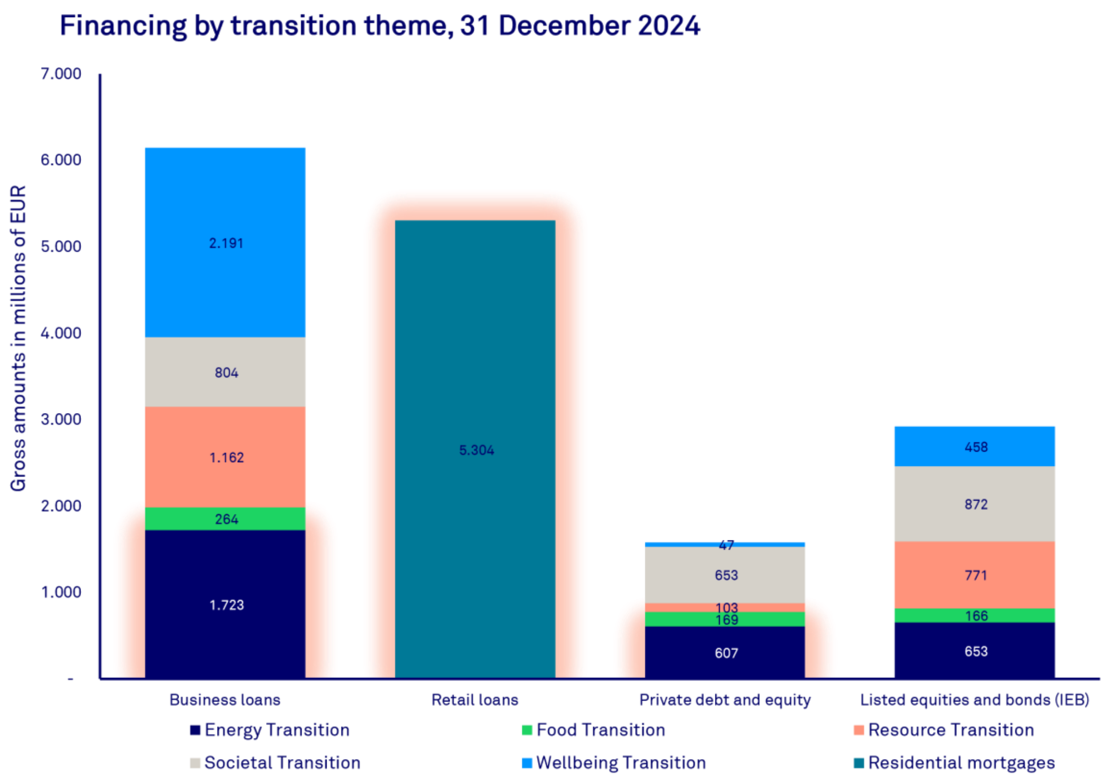

Figure 3: Financing by transition theme, 2024

Types of impact

It is important to clarify what we mean when we refer to impact measurement and to understand the different types of impacts and their limitations. It is also important not to oversimplify or overquantify impact. The methodological starting point for the impact calculations is the Impact-Weighted Accounts Framework (IWAF). The IWAF is written on behalf of the Impact Economy Foundation by among others, experts from Harvard Business School, Singapore Management University, Rotterdam School of

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Management and Impact Institute. This concentrates on the calculation and monetisation of positive and negative impact (externalities) but excludes system impact.

For more detailed information, please refer to the methodology section in the annex.

Absolute impact (positive and negative)
Absolute impact measures the total effect of an action without comparing it to alternatives. This can be categorised into positive or negative impacts:

- Negative impact encompasses harms done to individuals, communities or ecosystems such as pollution or forced labour.
- Positive impact includes effects that improve the wellbeing of a stakeholder. Examples of positive absolute impacts include the health benefits from the consumption of nutritious food or restoration of ecosystems.

Relative impact
Relative impact is the difference between absolute impact and the impact that would have occurred in a counterfactual or reference scenario. Essentially, what would have happened if the business had not undertaken their activities. When an activity leads to less negative impact compared to the reference scenario, this is recognised as positive relative impact or referred to as avoided impact.

Direct versus indirect impact
Impact can occur close to an organisation's activities, or further away in time and space.

- Direct impact refers to immediate effects resulting directly from an organisation's actions, such as the provision of financing to renewable energy projects.
- Indirect impact includes effects that arise outside the organisation because of the direct or indirect influence of the organisation. For instance, the greenhouse gas emissions avoided because of the financing.

Valuing impact

Negative impacts are viewed as societal costs, while positive impacts represent societal benefits. Monetising these impacts allows for the capture of costs and benefits, reflecting their desirability to society. By making these costs and benefits visible and comparable to financial values, companies and investors can make informed decisions. However, relying solely on financial figures can oversimplify complex challenges and overlook non-quantifiable values and systemic effects. To avoid this, qualitative assessments and stakeholder engagement remain essential.

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Results

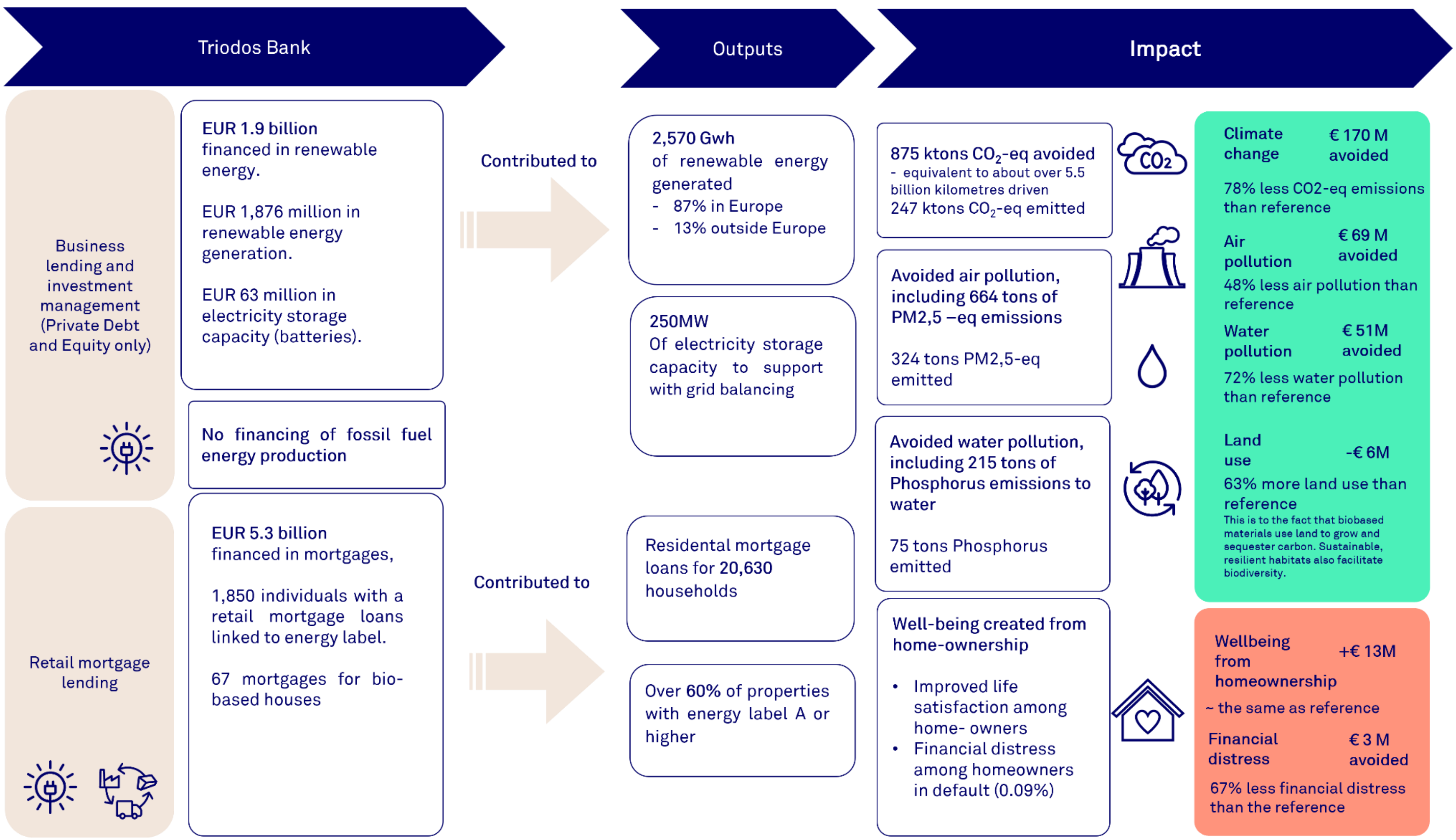

Figure 4: Impact at a glance – renewable energy & battery storage and mortgage lending, 2024

- Our values-based financing contributes to a more sustainable economy, where societal transitions are accelerated, and negative environmental impact is avoided.
- We have been a frontrunner in the energy transition since 1987. In 2024, our financing in the energy transition generated a 14% relative impact return. This means that for every euro of financing, EUR 0.14 worth of environmental impact is avoided. The largest part is limitation of climate change where for every euro of financing, EUR 0.08 euros (or 420g CO_2) of impact is avoided.
- With a long-term focus on high energy labels and sustainable housing solutions, our strategy ensures that the environmental footprint of our financed properties is significantly lower compared to conventional mortgage portfolios, resulting in EUR 18 million of relative positive impact for society.
- Our approach serves as a demonstrator that it is possible to finance a sustainable economy while steering towards planetary

Creating change: Our relative impact

We are good in sustainable financing with a strong emphasis on financial additionality, ensuring that capital can flow to transformative initiatives that accelerate transitions rather than merely funding business-as-usual projects. In 2024 alone, our financing in wind and solar energy generation, battery storage technologies and energy-efficient, bio-based mortgages have prevented the release of 875 kilotons of greenhouse gas emissions equivalents – equivalent to about over 5.5 billion kilometres driven.

Our commitment to climate change mitigation extends beyond exclusionary policies; we proactively fund renewable energy, regenerative construction materials and circular resource use to ensure that sustainable alternatives can scale. Financial additionality is central to this approach—our financing bridges funding gaps, making high-impact projects viable where traditional financiers hesitate. Consequently, our financing in solar, wind, battery storage and retail mortgages have significantly reduced air and water pollution, avoiding EUR 69 million in air pollution and EUR 51 million in water pollution. This quantifies the societal costs prevented, including improved public health, preserved ecosystems and reduced environmental remediation costs.

By demonstrating the viability of sustainable projects, we encourage investors to view these initiatives as viable opportunities and promote a shift toward sustainable investment. Our approach not only accelerates the energy and resource transitions but also sets a precedent for the financial sector.

Energy transition

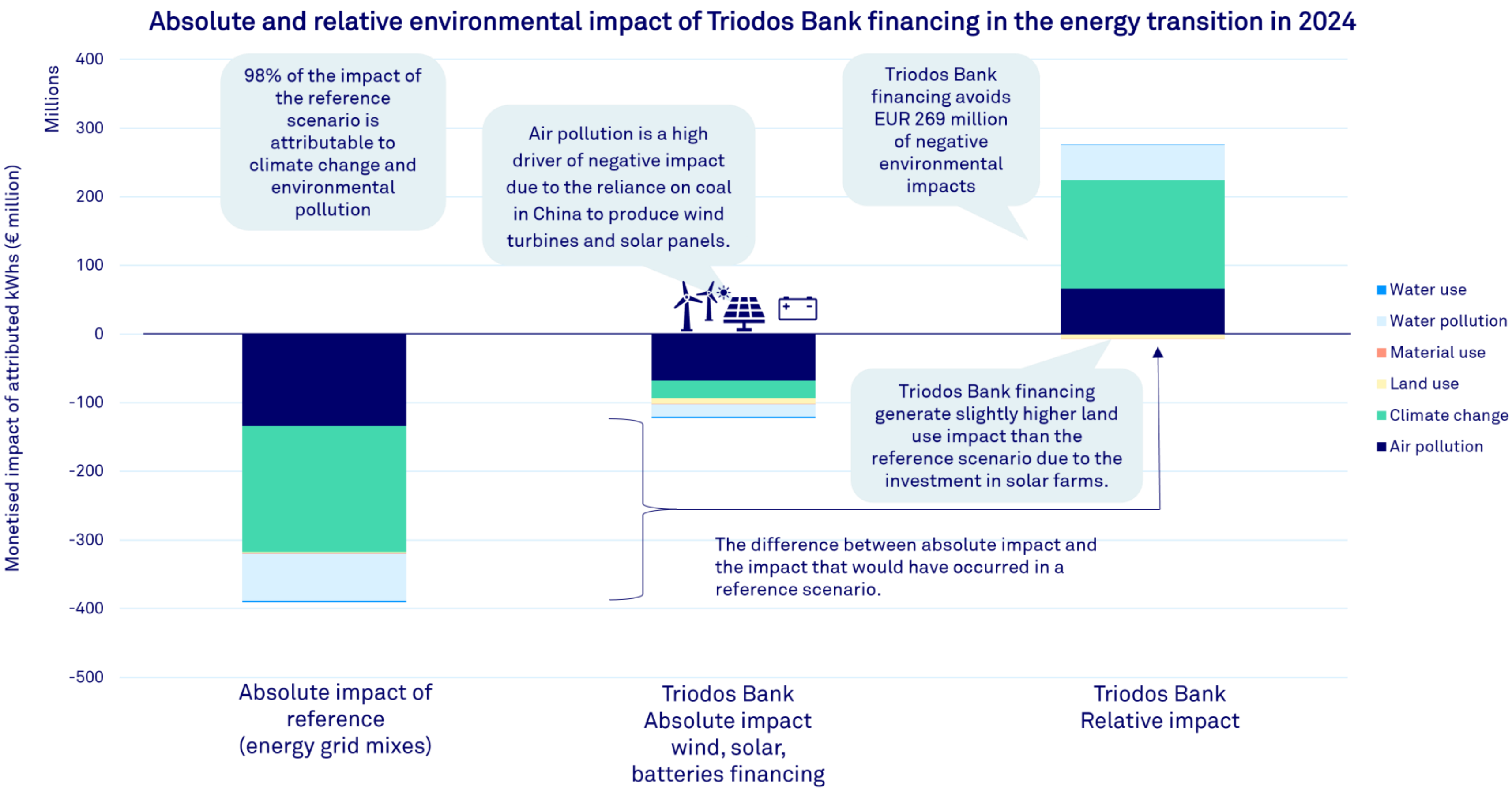

Figure 4: Absolute and relative impact of Triodos Bank's energy transition financing

Since 1987, we have been a pioneering force in financing the energy transition, sparking change with our support for the Netherlands' first wind turbine. Today, renewable sources account for nearly 25% of the EU's total energy supply, a remarkable increase from just 4% in 1990.[i] We are honoured to be recognised as the most active clean energy lead arranger internationally for the eighth consecutive year, underscoring our commitment to driving systemic change in the EU energy landscape.[ii]

In 2024, our outstanding amount of EUR 1.9 billion into renewable energy generation projects, primarily in wind and solar, through business loans and private debt and equity. These renewable sources drastically reduce contributions to climate change and air pollution compared to fossil fuel-dependent systems, which continue to harm our planet. By investing in battery storage, we not only enhance the efficiency of renewable energy but also eliminate the need for gas peaking plants, further minimising environmental degradation. This year, our financing efforts have avoided EUR 0.15 in environmental impact for every euro invested in wind energy and EUR 0.13 for solar energy— a testament to our dedication to a sustainable future.

In addition to electricity generation, the grid must also be made ready for the energy transition. We are financing innovative projects such as electric charging stations and battery storage solutions, essential for the transition to sustainable energy. Our portfolio now boasts significant investments in battery storage, with EUR 62 million outstanding in 2024, avoiding EUR 0.09 per euro outstanding. By enhancing the grid's capacity to accommodate more renewable electricity, we reduce reliance on peaking power plants, often powered by gas, driving forward the energy transition.

This focus on battery storage marks a new phase, highlighting the necessity to expand storage capacity for renewable energy growth. By prioritising these solutions, we accelerate the shift towards a clean, accessible and affordable energy system.

Our commitment to the energy transition extends to providing capital to underserved market segments, ensuring that innovative renewable energy and storage projects thrive. Our financial additionality shines in our support for early-stage and proof-of-concept initiatives, where traditional investors often hesitate. By fostering close collaborations with impact-driven entrepreneurs, we transcend conventional financing methods. We design tailored solutions that mitigate risks, attract co-investors and establish scalable models for future sustainable investments realising decent financial returns. This collaborative spirit empowers groundbreaking battery storage solutions and other pivotal energy transition projects, paving the way for their widespread adoption and a brighter, sustainable future.

Mortgage loans – energy and resource transitions

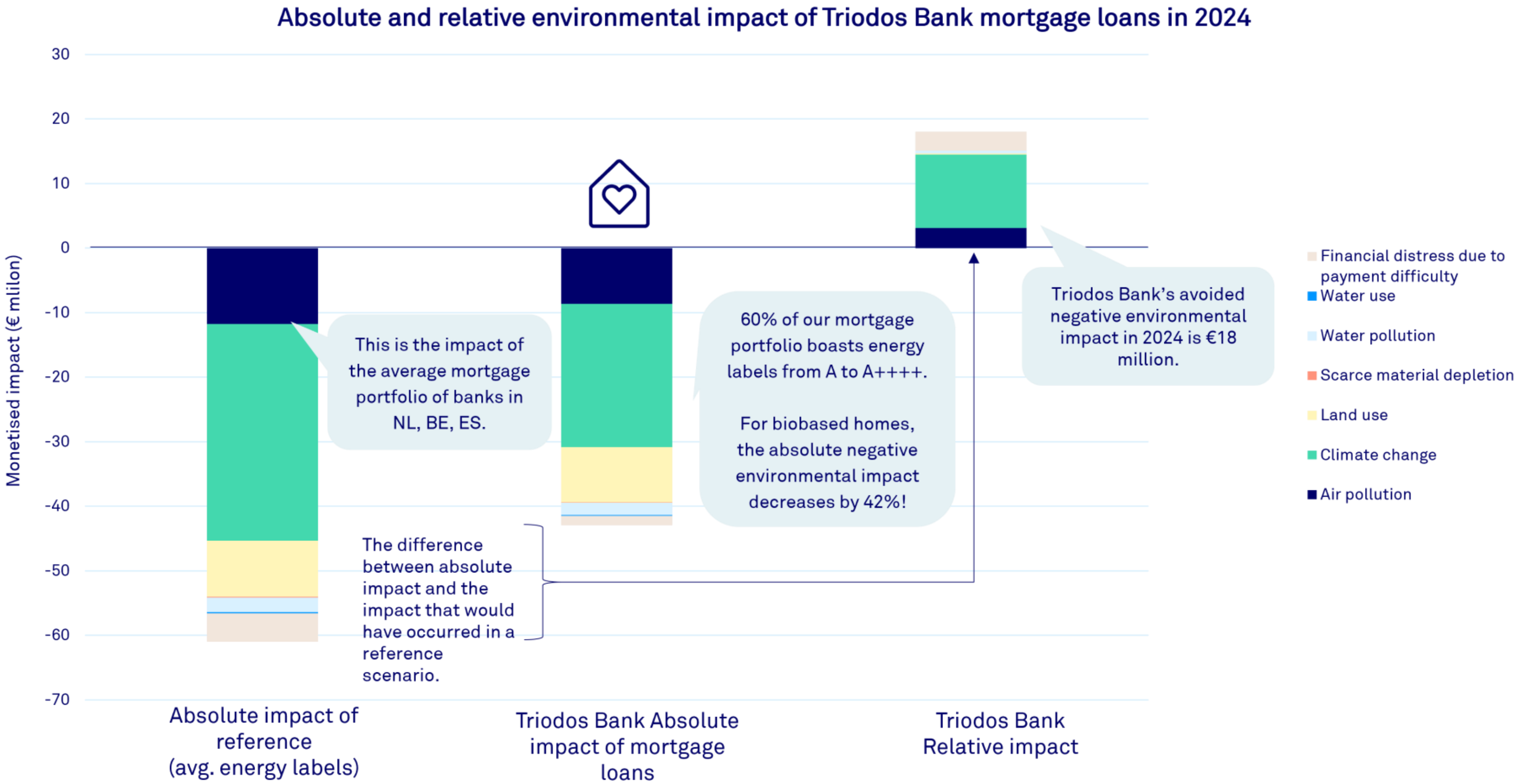

Figure 5: Absolute and relative impact of Triodos Bank's mortgage (bio-based) loans - energy and resource

At Triodos Bank, our commitment to sustainable mortgage provision not only empowers individuals to achieve home ownership but also drives meaningful environmental impact. Triodos Bank provides retail mortgages in 3 of our 5 countries: Belgium, the Netherlands and Spain. Our retail mortgage portfolio boasts a significantly lower impact on climate change and air pollution compared to the average mortgage portfolio. Each mortgage avoids approximately EUR 700 in negative environmental impact and creates approximately EUR 136 in positive social impact annually. In total, our mortgages have prevented 60 kilotons of greenhouse gas emissions equivalents, compared with an absolute impact 28 kilotons of greenhouse gas emissions equivalents. This achievement stems from our commitment to promote energy efficiency through favourable lending terms. With homes accounting for roughly one-quarter of total energy use in Europe, we are dedicated to catalysing systems change through this focus.[iii]

In our pursuit of sustainable innovation, we pioneered a new mortgage product in 2022: bio-based mortgages. These mortgages support construction with renewable, plant-based materials, which are far less energy-intensive and polluting than traditional materials like steel and concrete. Bio-based materials sequester CO_2 during their growth, emit minimal CO_2 during production, processing and transport, and offer excellent reuse potential. The avoided impact is over EUR 4,100 per bio-based mortgage in 2024.

Moreover, our mortgages create positive social impacts such as wellbeing and financial savings from home ownership. We recognise the importance of balancing home ownership with alternative housing solutions, particularly in light of the housing crisis. We do not finance second mortgages, prioritising accessibility and affordability for all. We actively support diverse housing methods to promote sustainable living, including co-housing and nature-inclusive options. By fostering a variety of housing types, we aim to contribute to systemic change that addresses the needs of communities rather than merely boosting individual financial value.

Our mortgage offerings exemplify financial additionality by facilitating the resource transition through financing energy-efficient and bio-based homes. Unlike traditional mortgages that may not stimulate energy efficiency or support bio-based materials, our approach incentivises homeowners to invest in sustainable practices, driving market transformation towards greener building methods. We want to ensure that our capital is directed towards homes that actively contribute to a circular and low-carbon economy. Furthermore, we engage proactively with policymakers and the broader financial sector to advocate for more ambitious sustainability standards in housing finance.

Potential for improvement – Absolute impacts

Our relative impact is largely derived from our commitment to financing activities that have nearly no contributions to climate change and air pollution during their use. However, we believe in the importance of transparency regarding the absolute negative environmental impacts and potential social risks within our value chains. Taking proactive steps to mitigate these negative effects ensures that our transition is genuinely sustainable.

It's interesting to highlight that contributions to climate change and air pollution represent both our largest relative and absolute impacts. By addressing these critical areas, we unlock substantial environmental benefits. Yet, their prominence underscores the urgent need for systemic change to diminish reliance on carbon-intensive and polluting manufacturing and production processes.

We acknowledge that even sustainable activities carry a negative environmental impact, particularly regarding climate change and biodiversity. In response, we have established climate targets for our own operations and our financed activities. We have also assessed our effects on biodiversity and set an initial set of targets related to financing Nature-based Solutions. For the specific targets and actions, please see the Climate and nature chapter of our Annual Report.

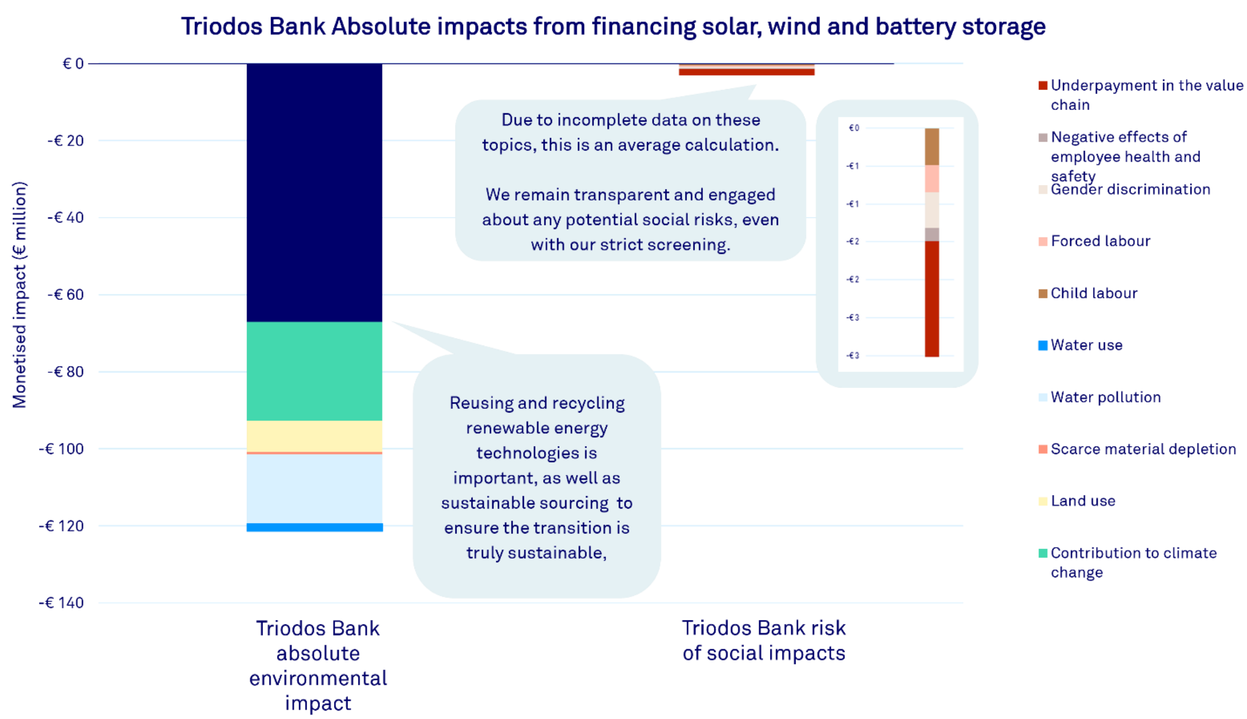

Figure 6: Triodos Bank's absolute impact financing solar, wind, battery storage

Renewable energy generation and battery storage present significantly lower environmental impacts compared to fossil fuels, yet the overall sustainability of these solutions hinges on the entire value chain. It's essential to grasp both the environmental and social implications to ensure that the production and manufacturing of clean energy technologies do not inadvertently harm vulnerable communities or ecosystems.

Due to limited available data the absolute impact calculation represents sector average data, and not solely data from our projects. We expect to mitigate the negative impacts through close engagement with our customers. Key environmental concerns include air pollution arising from the manufacturing of solar panels and wind turbines, which often depend on coal-based energy—particularly in China. Additionally, mining and processing materials such as copper and lithium for batteries can lead to significant water and air pollution. To mitigate these effects, we are good in resource recycling and sustainable sourcing practices. We have also advocated for heightened environmental and social due diligence in nickel supply chains. Nickel, a critical raw material for batteries alongside cobalt, lithium, copper and rare earth elements, carries substantial social and environmental risks due to issues like habitat destruction from mining, pollution and labour rights violations in affected regions.

Another noteworthy absolute impact is land-use change. Solar farms require considerable land which can disrupt ecosystems and biodiversity. To address this concern, we are committed to avoiding financing solar plants that encroach on land suitable for other vital activities.[iv]

The risk of negative social impact is smaller compared to environmental impact, as automation and mechanised production processes in renewable energy supply chains reduce reliance on labour-intensive practices. Additionally, we screen for potential human rights violations within our financing process. There is still a risk of negative social impacts within these value chains occurring during the mining and production phases in countries such as China, Chile and Guinea. The production of solar panels has been known to be marked by underpayment and reported cases of forced labour, especially in Xinjiang. We apply stringent due diligence to uphold human rights, steering clear of partnerships with non-compliant suppliers and monitoring controversies through external sustainability databases. We actively engage with industry organisations to strengthen standards and enhance due diligence in renewable energy supply chains.[v]

Resource transition – Retail mortgage lending

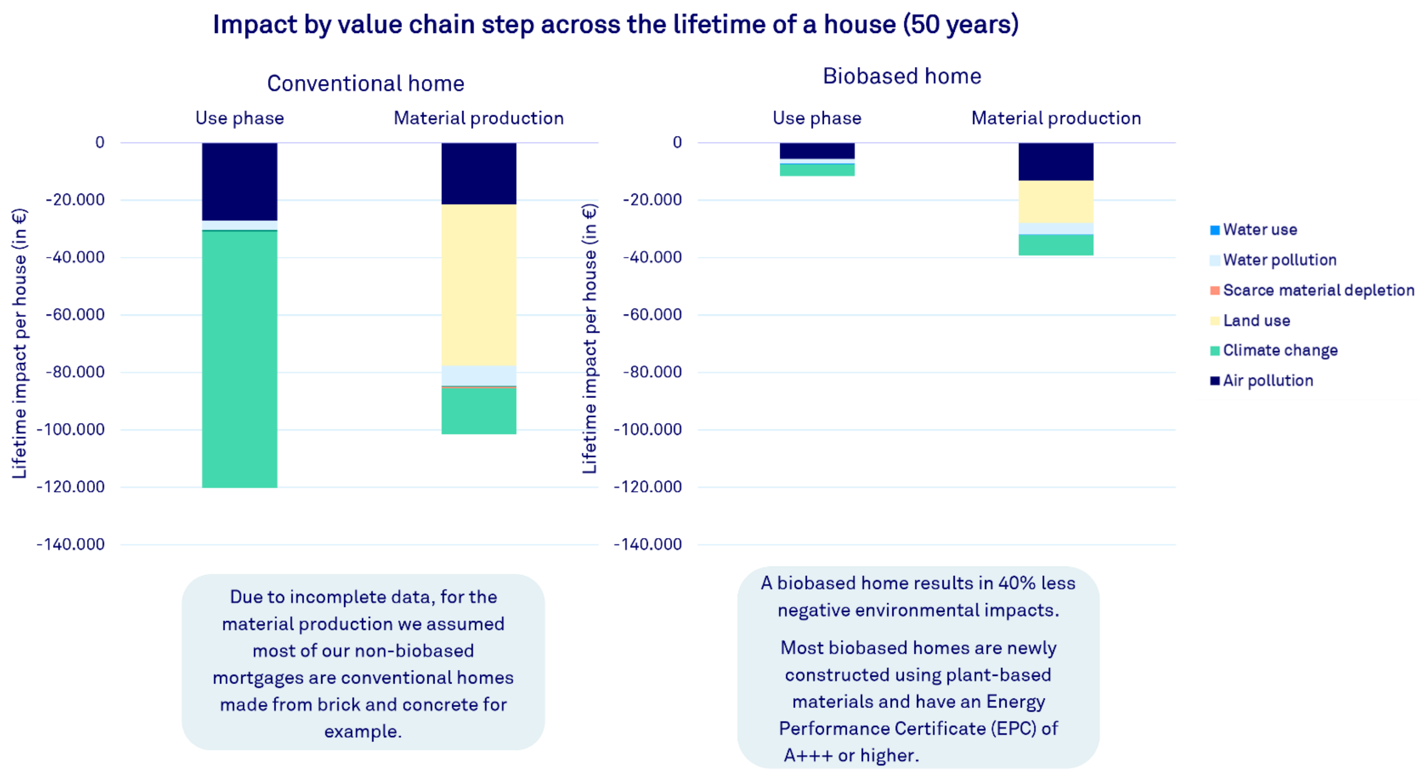

Figure 7 Impact by value chain step across the lifetime of a house (50 years)

We support evaluating the full environmental and social impacts of homes to safeguard the planet we all share. Energy-efficient and bio-based homes offer clear advantages over typical homes, they still generate some environmental harm. 60% of our mortgage portfolio boasts energy labels from A to A++++, the most significant impact remains on climate change. Electrifying homes with renewable energy substantially reduce these emissions, aligning with the energy transition. But as previously mentioned, the use of renewable energy manufacturing these technologies still contributes to carbon emissions. Material production for both conventional and bio-based homes also incur negative impacts, including climate change and air pollution.

However, bio-based options typically have a smaller footprint and sequester emissions when growing. Land use and the sustainable sourcing of materials continue to be crucial considerations in our approach. We recognise that the mortgage value chain encompasses various stages from home construction to energy efficiency, each of which can have environmental and social impacts. By promoting the use of sustainable materials, advocating for energy-efficient homes and engaging with stakeholders to ensure responsible practices, we aim to mitigate negative effects and contribute to a more sustainable and equitable housing market.

Insights

This analysis demonstrates that sustainability-oriented financial decisions can significantly avoid negative environmental impacts. As a bank, we direct capital towards high-impact initiatives that may struggle to secure funding from traditional sources. Providing these pioneers with support is key in catalysing systemic change. From this assessment, we have learned that it is not always simple to measure and report on the full scope of impacts. The results in this assessment are largely the negative externalities. These results steer the wider decisions Triodos Bank takes in financing the transitions.

Mitigating negative impacts alone does not resolve the underlying challenges; it requires making explicit choices to phase out unsustainable practices and rethinking economic priorities to focus on wellbeing and ecological balance. This holistic approach to impact management ensures that our financing also contributes to long-term systemic change. For example, the shift away from fossil fuels not only reduces emissions but can also be an opportunity to restructure financial incentives and infrastructure towards renewable energy with more inclusive ownership models. Similarly, the move towards circular resource use—such as reusing materials in the construction and technology sectors—demonstrates how economic models can be redesigned to reduce waste, enhance resource efficiency and promote shared responsibility for sustainable material cycles.

Investments in renewable energy and bio-based construction have played a pivotal role in propelling the energy and resource transitions. In comparison to the absolute negative impact of the reference scenarios, renewable energy and biobased homes have very little absolute negative impact. Renewable energy is becoming a mainstream energy source, and with the support of battery storage financing, these technologies can scale effectively. Our commitment to sustainable financing avoids a significant amount of greenhouse gas emissions and pollution, contributing to healthier ecosystems and communities.

Additionally, transitioning sectors to become future proof is essential, especially considering resource depletion. By showcasing alternative economic activities, such as bio-based construction and renewable energy projects, society can envision a sustainable future and channel more energy and capital into future-proof jobs. While bio-based homes are currently a niche, they introduce a mindset shift regarding how the built environment can contribute to sustaining and restoring nature.

With our financing choices we hope to address current environmental challenges but also lays the foundation for a resilient and sustainable economy. Through these efforts, we aim to inspire stakeholders across sectors to embrace sustainable practices and collaborate in driving the systemic change necessary for a thriving planet.

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- We have been a frontrunner in the energy transition since 1987. In 2024, our financing of solar, wind and battery storage generated a 14% impact return. This means that for every euro of financing, EUR 0.14 worth of environmental impact is avoided. This is mostly driven by contribution to climate change where 800 ktonnes of CO2 has been avoided.
- Cleaner air and healthier communities: Our energy transition financing has led to a reduction of 66 million in air pollution when compared to industry averages, showcasing our dedication to maintaining healthier ecosystems and communities.
- Our loans and investments in solar and wind energy accelerate the greening of Europe's energy grid, driving systemic change.
- We fund the next phase of the energy transition by financing battery storage this enables more renewable energy generation and the replacement of gas peaking plants.
- We are committed to improving the renewable energy value chain. Through our collaboration with renewable energy suppliers, we strive to mitigate negative social impacts and encourage the responsible sourcing and recycling of materials.

Deep dive energy transition

Creating change: Our relative impact in the energy transition

The energy transition is a cornerstone of our mission. Through innovative financing, we are dedicated to transforming the energy system from fossil fuels to renewable energy sources. At Triodos Bank, we are dedicated to driving the energy transition forward by providing capital to underserved market segments. We ensure that innovative and high-impact renewable energy and storage projects become financially viable. Our financial additionality shines through in our commitment to early-stage and proof-of-concept projects, where conventional investors often hesitate to engage. By fostering close collaboration with impact-driven entrepreneurs, we go beyond traditional financing methods. We design tailored solutions that mitigate risks, attract co-investors and establish scalable models for future sustainable investments. This collaborative effort allows groundbreaking battery storage solutions and other pivotal energy transition initiatives to prove their viability, paving the way for widespread adoption.

For every euro invested, we avoid EUR 0.09 in negative environmental impact for batteries, EUR 0.15 for wind energy and EUR 0.13 for solar energy.

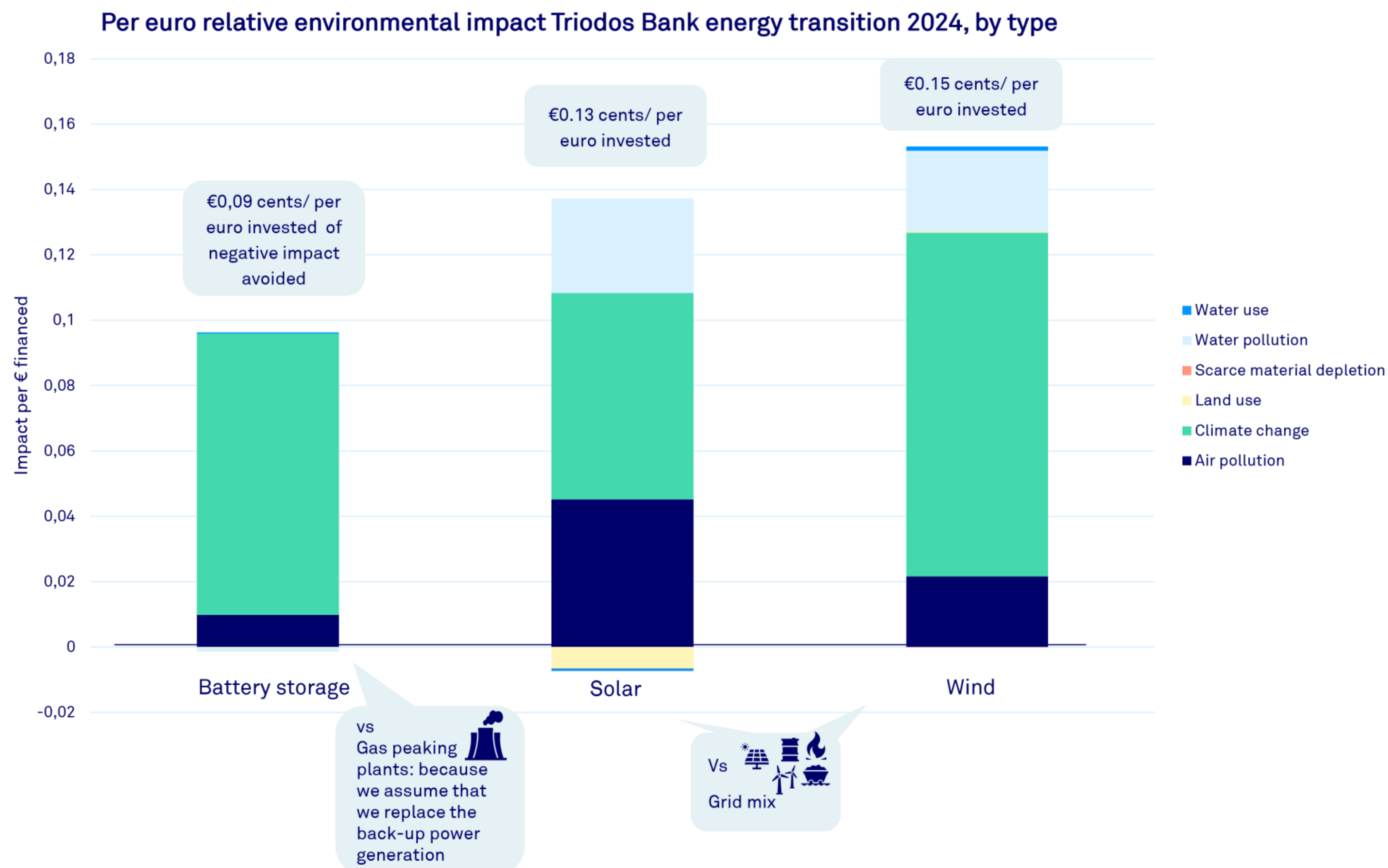

Figure 8: Per euro relative impact renewable energy in 2024

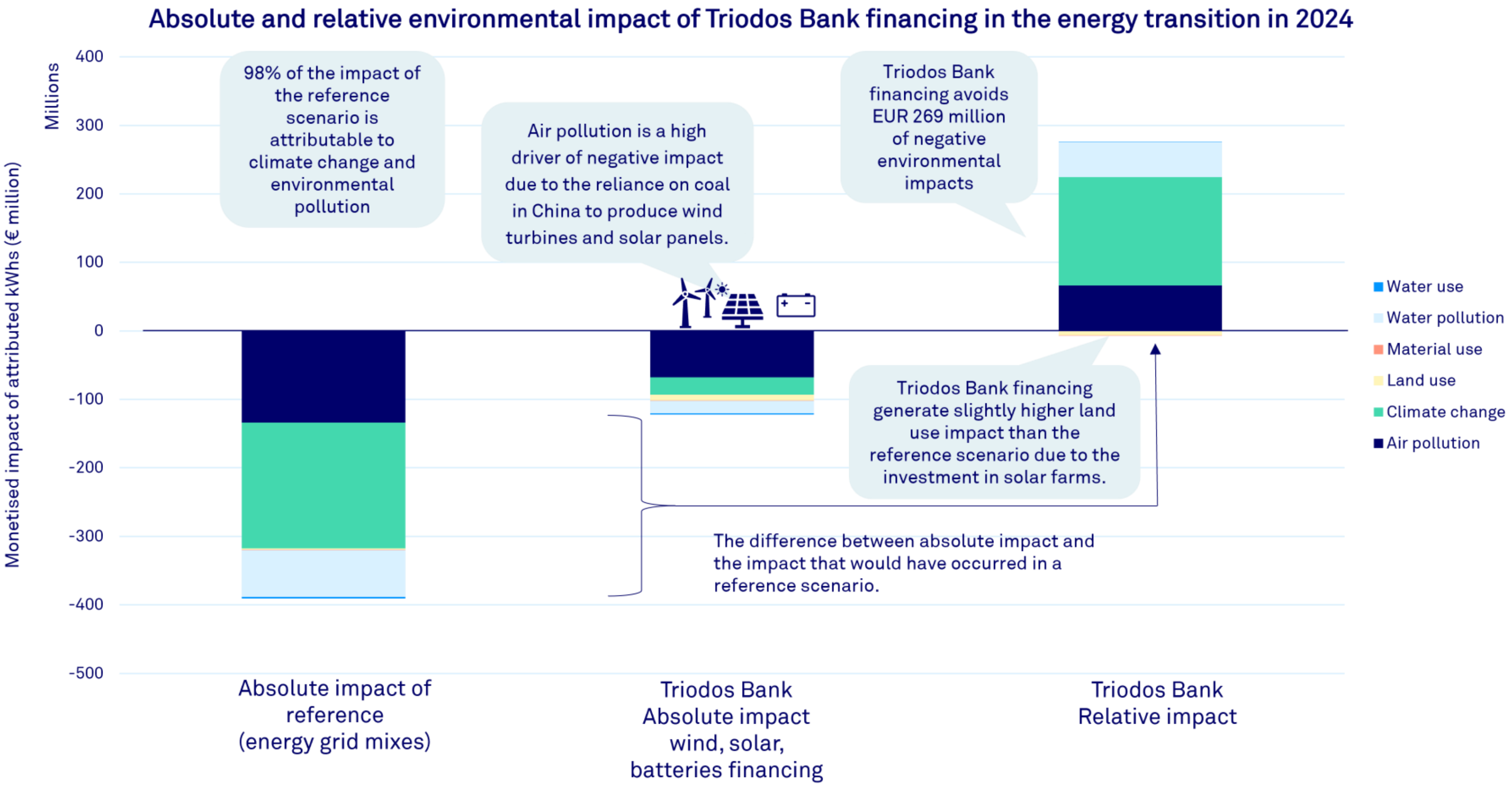

Figure 9: Absolute and relative impact of Triodos Bank's energy transition financing

Solar and wind energy generation

Solar and wind projects produce significantly less greenhouse gas emissions and do not emit harmful air pollutants throughout their lifecycles compared to fossil fuels. From EUR 1.87 billion in outstanding loans, we have facilitated the production of 2570 GWh of clean electricity.

Avoided negative environmental impact: In 2024 alone, our solar and wind energy generation efforts avoided EUR 260 million in negative environmental impact. The use phase of wind and solar energy generation is entirely free of greenhouse gas emissions, thereby making a substantial contribution to combating climate change. Additionally, the operation of these technologies does not lead to water or air pollution.

Our long-term commitment has effectively driven systemic change in the energy sector, from financing the first wind turbine in the Netherlands in 1986 to supporting the largest electric vehicle bi-directional charging station in 2019. Although the relative impact from our financing in wind and solar projects has slightly decreased since 2023, reflecting the broader movement towards greener grid mixes across Europe, we remain focused on supporting society's transition to a fossil-free economy. This includes financing electric charging stations and battery storage projects, which are essential for expanding the capacity of the national electricity grid.

Beyond financing, we consistently advocate for renewable energy generation. In 2023, we were the first bank to sign the Fossil Fuel Non-Proliferation Treaty. This global initiative seeks to halt the expansion of fossil fuels and promote a fair transition to renewable energy sources. By financing change and changing finance, we are actively contributing to the greening of Europe's energy systems.

Battery storage

As society moves away from fossil fuels, the demand for electricity continues to grow. To meet this growing demand, structural changes to the electricity infrastructure are essential. Battery storage plays a crucial role in this transition by storing excess renewable energy generated during peak production times and releasing it during periods of high demand, ensuring a reliable and consistent energy supply.

Recognising the critical need for energy storage, we financed our first battery projects in 2016. Since then, we have addressed grid stability challenges by financing renewable energy generation and supporting behind-the-metre systems that optimise energy use and reduce grid dependency. This commitment translates into robust support for energy storage solutions that benefit large-scale renewable projects and smaller businesses and households alike.

Energy management: We finance battery storage solutions that capture excess renewable energy and release it when needed, offering a cleaner and more cost-effective alternative to gas peaking plants.

Avoided negative environmental impact: We support systems that significantly reduce contributions to climate change and air pollution. Batteries operate cleanly, in stark contrast to gas peaking power plants, which emit greenhouse gases and harmful air pollutants.

Impact metrics: In 2024, we financed battery storage projects with a total installed capacity of 81 MW, resulting in an estimated 40 GWh of electricity discharged. These initiatives directly avoided EUR 6 million in negative environmental impact.

Future benefits: By enhancing battery storage capacity, we enable the expansion of renewable energy generation, further preventing negative impacts associated with fossil fuels.

Potential for improvement – Absolute impacts

While renewable energy generation and battery storage significantly reduce negative environmental impacts compared to fossil fuels, their overall sustainability hinges on the entire value chain.

Value chain sustainability: Renewable technologies are only as sustainable as their supply chains. It is essential to assess and minimise environmental and social impacts throughout the entire lifecycle.

Preventing shifts in harm: We must ensure that the energy transition does not inadvertently transfer negative consequences to vulnerable communities or ecosystems, particularly in emerging economies.

Responsible decision-making: Transparency regarding absolute impacts enables balanced decisions that protect both people and the planet while promoting renewable energy.

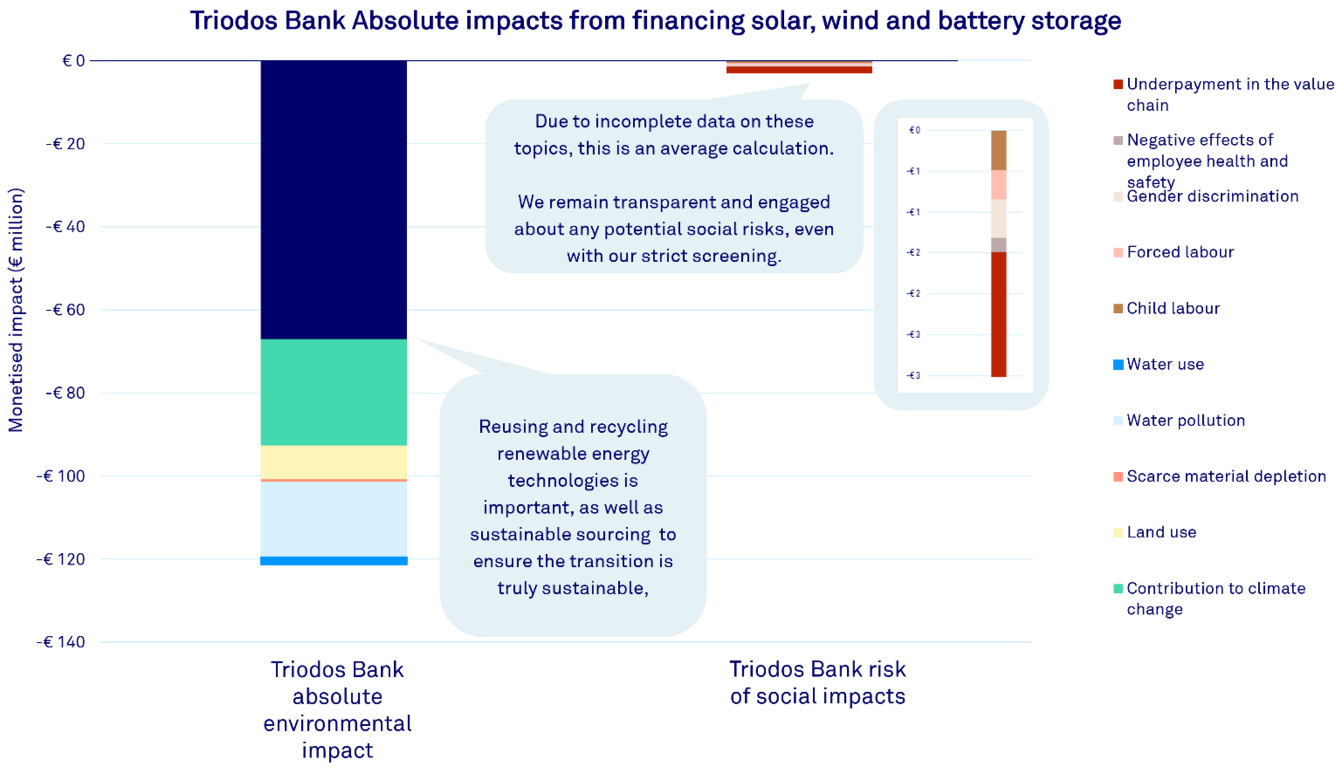

Figure 10: Triodos Bank's absolute impacts from financing solar, wind and batteries

Environmental impact

The primary negative environmental impacts linked to solar and wind energy generation stem from contributions to climate change and air pollution. Notably, these are both the largest avoided impacts and the most significant absolute impacts. Mitigating these areas yields substantial environmental benefits; however, their prominence highlights the urgent need for systemic change to reduce reliance on carbon-intensive, polluting manufacturing and production processes. We exclude companies in the metals and mining industry that lack comprehensive global environmental management systems or are not members of the International Council on Mining and Metals.

Air pollution: The most significant negative impact in the value chains of solar panels and wind turbines arises from air pollution, primarily due to coal reliance in China for producing steel. We assess supply chain emissions during our due diligence and engage with clients and stakeholders to promote recycling and reusing resources, reducing pollution and waste.

Land use: Land-based solar farms require more land than fossil fuels, impacting biodiversity. Projects undergo screening for biodiversity impact, and we are committed to exploring creative solutions, such as utilising the roofs of greenhouses for solar panels.

Water pollution: Battery production contributes to water pollution from mining and manufacturing processes. We require robust environmental management systems and collaborate with industry groups to promote responsible sourcing of materials like nickel for battery production.

Life cycle impact of batteries: The end-of-life phase of batteries presents potential negative environmental impacts, which are not included in this analysis due to a lack of data. However, we promote the reuse and recycling of renewable energy technologies to mitigate these risks and minimise their overall environmental footprint.

Social impact risks

The value chains of solar panels, wind turbines and batteries pose risks of potential negative social impacts. Mining, material production and manufacturing often occur in regions where human rights violations are prevalent. Due to limited data on human rights abuses, we rely on estimates and proxies to understand adverse social impacts, focusing on our financing without direct comparisons to reference scenarios.

Human rights violations: Risks such as underpayment are common in the mining sectors of countries like Chile, Guinea and China. Additionally, there are concerns about forced labour in the Xinjiang region of China, child labour in aluminium mining in Guinea and copper mining in Chile.

Labour intensity in solar panel production: The production of solar panels is labour-intensive, resulting in higher risks of underpayment and forced labour compared to the more automated processes used for wind turbines and battery production.

To mitigate these risks, we employ an extensive due diligence process to evaluate whether solar panel suppliers effectively identify, prevent and account for supply chain risks. We engage with suppliers in the solar panel value chain to ensure their strong commitment to human rights; we do not support those who cannot meet this standard. We also monitor controversies using external sustainability databases related to human rights violations in wind and solar power generation. Additionally, we have raised these concerns with sector organisations, contributing to improved industry standards and due diligence procedures within the supply chain.

Triodos Bank's head office is made of primarily bio-based materials and was designed with circular economy principles in mind, using nature as inspiration while also adapting it to the needs of local fauna and ecosystems.

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Triodos Bank

- With a long-term focus on high energy labels and sustainable housing solutions, our strategy ensures that the environmental footprint of our financed properties is significantly lower compared to conventional mortgage portfolios, resulting in EUR 18 million of relative positive impact for society. Our negative impact is almost 30% lower than a standard mortgage portfolio.
- Our mortgage portfolio has avoided 60 kilotonnes of greenhouse gas emissions in 2024. Also, by promoting energy-efficient homes, we achieve EUR 3 million in reduced air pollution.
- Our bio-based mortgages have the potential to avoid about EUR 4,100 per mortgage in negative environmental impact per year.
- Our bio-based mortgages, introduced in 2022, promote the construction of homes using renewable, plant-based materials that are significantly less energy-intensive and polluting than traditional options like steel and concrete. On average, the materials and energy use in biobased homes have 42% less environmental impact than conventional homes.

Deep dive mortgage loans

Creating change: Our relative impact from mortgage loans (energy and resource)

Resources and materials are vital to our global economy and the structures we inhabit. We recognise that housing is a fundamental human right and are committed to understanding the full impact of the places that we call home. To protect the shared environment, we drive the construction and renovation of buildings towards greater energy efficiency and the use of more sustainable materials. By offering favourable terms for green renovations and energy-saving measures, we contribute to a more sustainable world.

Our mortgage offerings exemplify financial additionality by driving the resource transition through the financing of energy-efficient and bio-based homes. By providing preferential rates for sustainable housing, we empower homeowners to invest in energy efficiency and bio-based construction, catalysing a significant market transformation towards greener building practices. Our criteria integrate environmental impact, energy performance and material sustainability ensuring that our capital supports homes that actively contribute to a circular and low-carbon economy. Moreover, we proactively engage with policymakers and the broader financial sector to advocate for more ambitious sustainability standards in housing finance, reinforcing our commitment to a sustainable future.

Mortgages

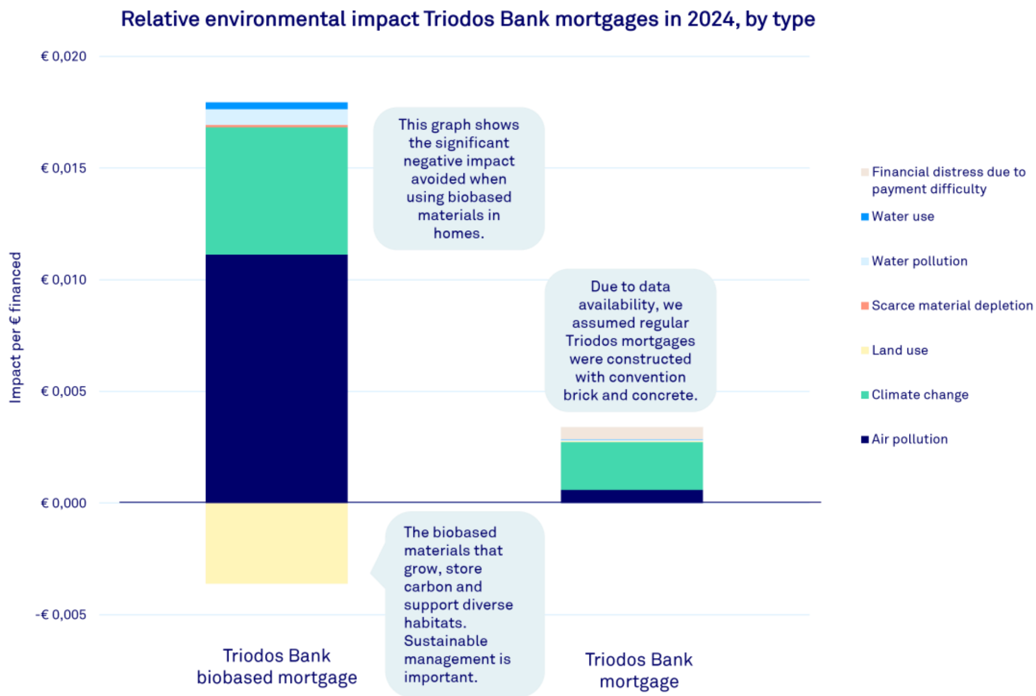


Figure 11: Relative impact Triodos Bank mortgages in 2024, by type

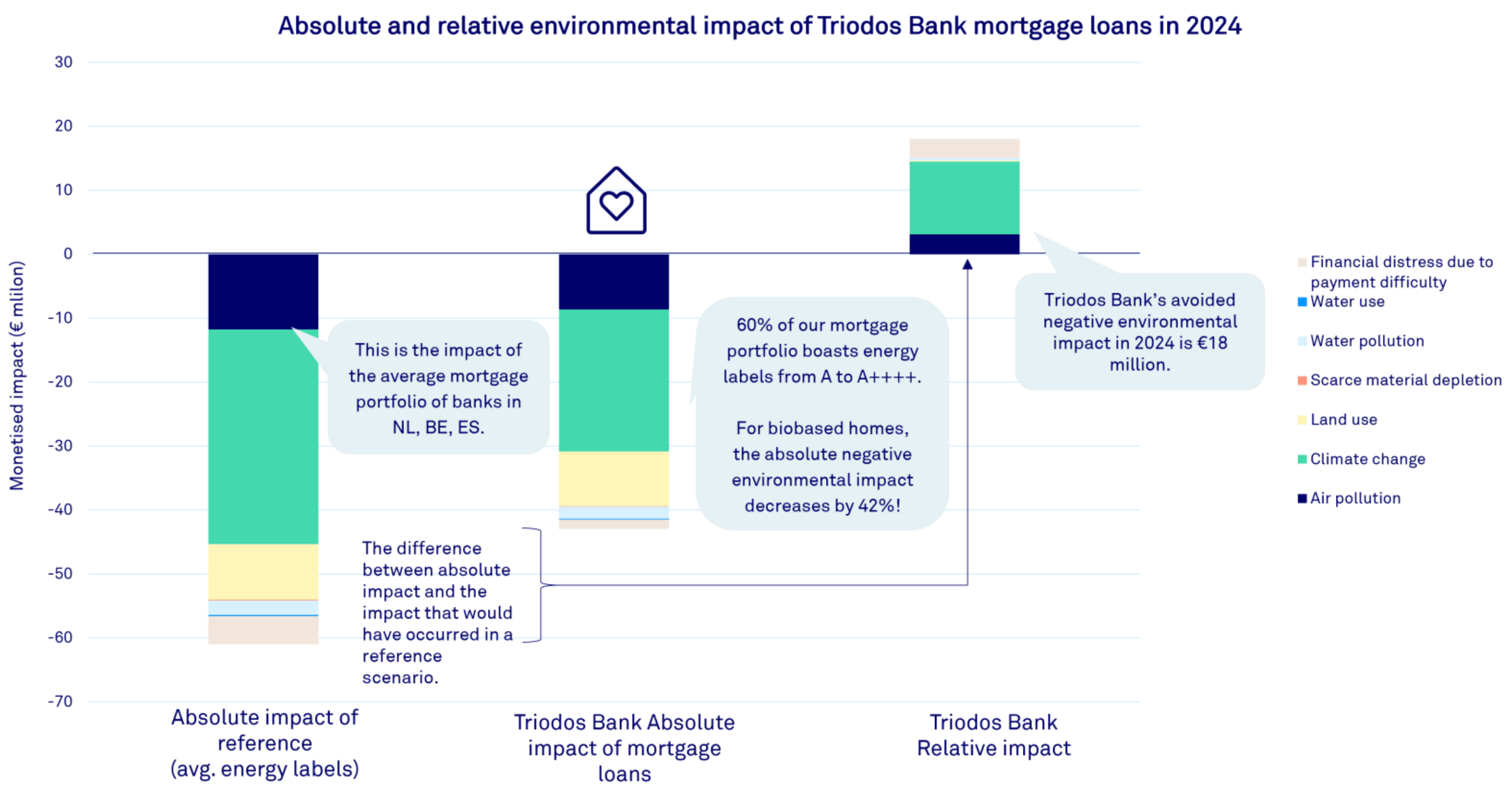


Figure 12: Absolute and relative impact of Triodos Bank (biobased) mortgage loans

Avoided negative impact: In 2024, our mortgages contributed to an avoided negative environmental impact of EUR 18 million (EUR 700 per mortgage per year), primarily driven by reductions in climate change and lower air pollution.

Operational efficiency: This lower negative impact occurs mainly during the use phase.

Material impact: While energy efficiency is currently the most important action to take to reduce environmental impacts of homes, the choice of materials is also an opportunity to reduce negative impact.

Bio-based mortgages

Triodos Bank was the first bank in Europe to link energy labels of homes to financial conditions and the first bank in the Netherlands to offer a bio-based mortgage, promoting the use of natural and regenerative materials. These mortgages support construction with renewable, plant-based materials, which are far less energy-intensive and polluting than traditional materials like steel and concrete. Bio-based materials emit minimal CO_2 during production, processing and transport, and offer excellent reuse potential.

A biobased mortgage saves 123,000 EUR in environmental impact over 30 years.

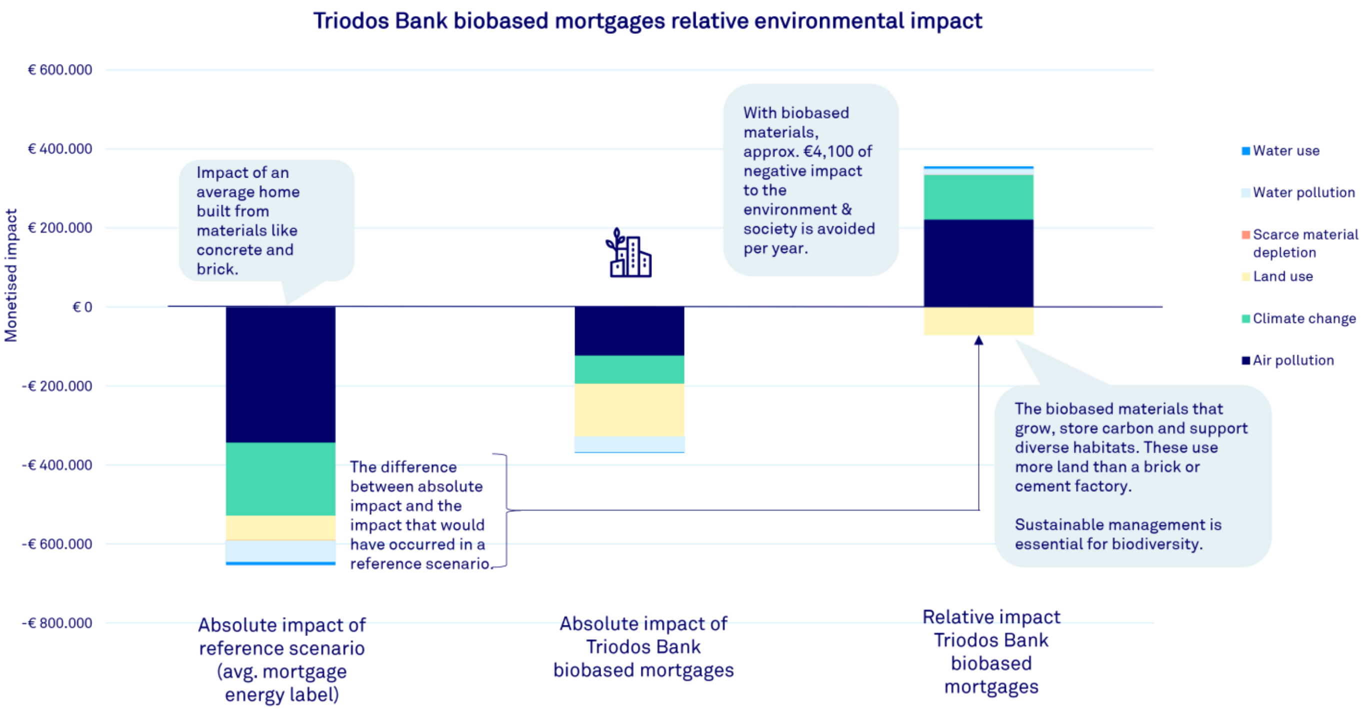


Figure 13: Triodos Bank biobased mortgages relative impact

Reduced impact: The use of bio-based materials in single-family homes results in approximately 42% less negative impact when compared to conventional new-built homes. We have provided roughly 70 bio-based mortgages which has led to EUR 285 thousand in avoided negative environmental impact. This amounts to EUR 4,100 per mortgage per year.

Material advantages: Conventional homes are built primarily with heavily polluting reinforced concrete, brick and mineral wool insulation. Bio-based homes use materials like cross-laminated timber (CLT) in the main frame and wood fibre[1] as insulation, resulting in significantly lower carbon emissions and air pollution. From an end-of-life perspective, materials used in a bio-based home are also much easier to disassemble and easier to recycle.

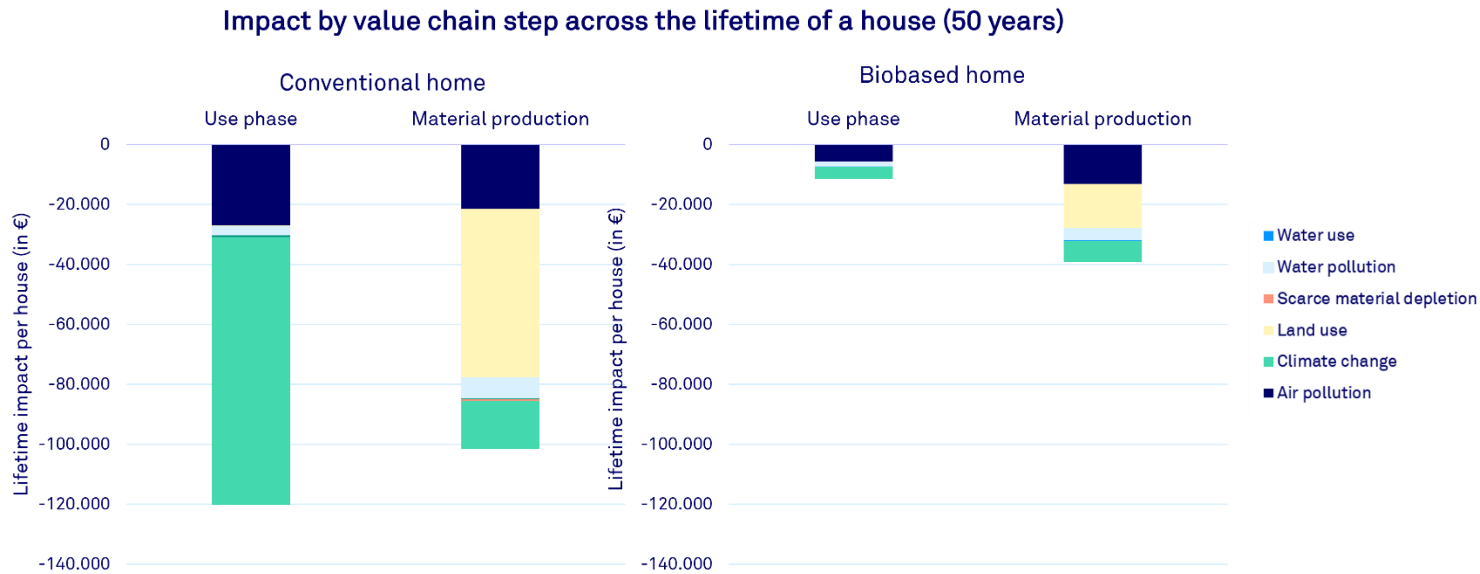
Land use considerations: Consequently, financing bio-based homes, our portfolio has a greater impact on land use compared to a conventional mortgage portfolio. Growing trees or other plants grow and remove carbon from the air before being used as a building material. In comparison, concrete, steel and brick do not absorb any only emit carbon emissions while being produced.

Potential for improvement – Absolute impacts

At Triodos Bank, we believe it is crucial to understand the full impact of homes to safeguard our shared environment. While our financing of bio-based and energy-efficient homes avoids many negative impacts, there remain environmental challenges associated with the construction and material production and the use phase of these homes. Enhancing the energy efficiency of homes substantially reduces their contributions to climate change and air pollution; however, some negative environmental impacts persist due to material production and usage. In our mortgage portfolio, the largest negative environmental impact comes from contributions to climate change, followed by air pollution. For bio-based mortgages, the most significant negative impacts are land use and air pollution.

[1] There are many types of natural materials that can be used as building materials such as straw, flax and even fungi. Due to a lack of data, the calculations are made with the assumption of wood CLT being the main material. For more assumptions, please see the methodology section.

Environmental impact



Due to incomplete data, for the material production we assumed most of our non-biobased mortgages are conventional homes made from brick and concrete for example.

A biobased home results in 40% less negative environmental impacts.

Most biobased homes are newly constructed using plant-based materials and have an Energy Performance Certificate (EPC) of A+++ or higher.

Figure 14: Impact by value chain step across the lifetime of a house (50 years)

Energy use: Even with 60% of our mortgage portfolio having an energy label A to A++++, the largest negative environmental impact remains contribution to climate change. This is driven by the energy use of a home. As a home becomes more energy efficient, the materials used in its construction or renovation increasingly contribute to the total negative impact.

Material production: Conventional homes generate significant negative impacts due to materials like concrete and brick. While bio-based homes have a lower overall impact, they still face challenges related to land use.

Sustainable sourcing: Sourcing materials from sustainable suppliers and maximising the reuse and recycling of materials are essential to minimise environmental impacts.

Land use (bio-based mortgages): The use of wood in bio-based homes results in higher land use. Consequently, by financing bio-based homes, our portfolio has a greater impact on land use compared to a conventional mortgage portfolio. However, these trees or other building materials grow and remove carbon from the air before being used as a building material. In comparison concrete, steel and brick do not absorb any carbon and only emit carbon emissions while being produced.

Social impact of our mortgages

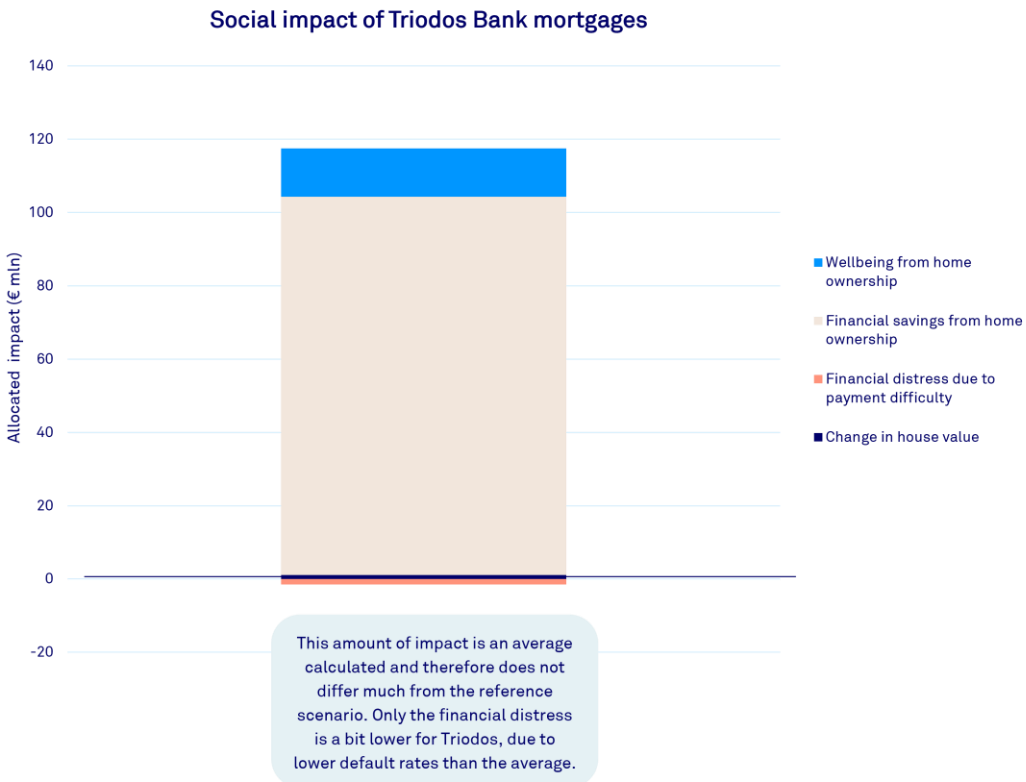


Figure 15: Social impact of Triodos Bank mortgages

By offering mortgages focused on sustainable practices, we not only avoid negative environmental impacts but also generate substantial financial and societal benefits. Our value creation aligns closely with that of the average bank for most social and financial impacts. For several financial and social impacts included in this analysis, we did not expect a significant difference. However, some benefits associated with bio-based materials or living in energy-efficient homes can be challenging to quantify but are nonetheless significant.

Homeownership wellbeing: Through our mortgage provision, we facilitate homeownership for clients, enhancing life satisfaction and positively impacting overall wellbeing. Homeownership can foster a sense of stability and community, leading to stronger social ties and increased engagement in local initiatives.

Financial savings: Our customers experience financial benefits as interest payments on mortgages are still significantly lower than the costs of renting a home.

Lower default rates: Our mortgage portfolio has lower default rates compared to the average bank (0.09% vs. 1%), valued at approximately EUR 3 million in 2024.

Health benefits: Bio-based and energy-efficient homes contribute to improved health outcomes by utilising non-toxic, renewable materials that reduce indoor air pollutants and allergens

Our mortgage offerings extend beyond financial transactions; they foster significant social benefits that contribute to a more sustainable and equitable society. By facilitating homeownership, we enhance life satisfaction and community engagement, while our focus on energy-efficient and bio-based homes promotes health benefits and improved indoor air quality. Clients enjoy financial savings through lower interest payments, and our lower default rates reflect the financial stability of our borrowers.

While this enhances life satisfaction and improves financial positions, we recognise the importance of balancing home ownership with alternative housing solutions, especially considering the housing crisis. Many countries benefit from positive rental markets, and we actively support diverse housing methods, including co-housing and nature-inclusive options, to promote sustainable living. Furthermore, we do not finance second mortgages, prioritising accessibility and affordability for all. By fostering a variety of housing types, we aim to contribute to systemic change that addresses the needs of communities rather than merely boosting individual financial value.

References

[i] European Commission (2022). Energy statistics - an overview - Statistics Explained

[ii] Triodos Bank (2024). Clean Energy Pipeline | Triodos Bank

[iii] European Commission (2022). Energy consumption in households - Statistics Explained

[iv] Triodos Bank (2023). Unieke innovaties voor groene warmte en energie | Triodos Bank.

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