signify

Climate Transition Plan

Intro

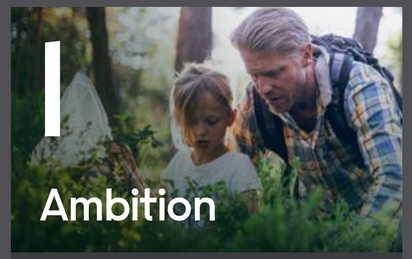
Welcome to Signify's Climate Transition Plan. This document sets out the company's climate strategy, ambitions, and action plan in line with our net-zero target for 2040.

Signify has an important role to play in the transition to a global low-carbon economy. According to the International Energy Agency (IEA), in 2022, lighting accounted for more than 2% of global greenhouse gas emissions[1], equivalent to the impact of aviation.

Climate action has been at the center of Signify's sustainability strategy for more than a decade. We took the lead in introducing more energy-efficient LED lighting and have worked to reduce greenhouse gas emissions across our entire value chain. Our current sustainability program – *Brighter Lives, Better World 2025* – sets out to double the pace of decarbonization required under the Paris Agreement 1.5°C objective.

Our Climate Transition Plan is inspired by the four As of the climate leadership framework, published by the We Mean Business Coalition (WMBC).[2] This framework emphasizes: Ambition, Action, Advocacy and Accountability.

Signify's Climate Transition Plan



1 Ambition

Emissions reduction targets for full value chain

2025 -40% vs 2019

2030 -50% vs 2019

2040 -90% vs 2019

2 Action

- **Suppliers**
- **Operations**
- **Travel and commuting**
- **Logistics**
- **Use phase**
- **End of life**
- **Risks and opportunities**
- **Investments and business models**

3 Advocacy

- **Policy advocacy**
- **Lobbying and trade associations**
- **Specific policy levers**

4 Accountability

- **Just transition**
- **Stakeholder consultation**
- **Governance and reporting**

Signify will report regularly on its progress towards this plan through the company's Annual Report, Sustainability Supplements and website.
This Climate Transition Plan was approved by Signify's Board of Management; it was also subject to extensive stakeholder consultation (for details, see page 30).

[1] Based on estimated IEA lighting emissions and global energy-related emissions

[2] WMBC is a coalition of non-profit organizations working with business to support the transition to a net-zero economy. For more information, please refer to: www.wemeanbusinesscoalition.org.

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Message from the CEO

Light is essential for our society. With our leadership comes the responsibility for the way lighting impacts the environment around us. We believe Signify has to play a critical role in ensuring that the transformative power of light does not come at the expense of our planet.

We have been at the forefront of the transformation of the lighting industry. In 2006, we called for the phase-out of incandescent lighting at a time when it accounted for two-thirds of our sales volume. While this radical shift challenged many within the company and among our stakeholders and peers, it was the foundation of our industry leadership position today.

Since then, we have made leaps forward in energy efficiency and almost every other measure of sustainability in lighting. Today, 87% of our revenues come from energy-efficient LED-based technologies. And more recently, we have been able to pioneer ultra-efficient technologies that last longer and greatly surpass the energy savings previously possible with LED. As a result of our innovations, we have achieved a 50% absolute reduction in greenhouse gas emissions across our entire value chain, including during the use phase, since 2019.

We firmly believe that there is much more we can do. Today, we are raising our ambitions once again, with a plan that builds on close to two decades of action. Signify's 2040 Climate Transition Plan is an important evolution in our sustainability journey – a pledge to go further and faster. It details how Signify will deliver on our science-based net-zero targets with a commitment to reduce our greenhouse gas emissions by 90% across our full value chain by 2040 against the 2019 baseline year.

A crucial point of progress is that these efforts encompass not just our own operations, but our entire value chain, and beyond. We will use our voice to engage our customers, employees, and public decision-makers on how to accelerate climate action, toward brighter lives and a better world. With this vision and ambition in mind, I am proud to share with you Signify's Climate Transition Plan.

Eric Rondolat
CEO Signify

Executive summary

This Climate Transition Plan sets out Signify's roadmap to net-zero. By 2040, we aim to reach net-zero and reduce absolute scope 1, 2 and 3 greenhouse gas emissions by 90% and eliminate the remaining 10% through carbon removals.

The use phase of our products accounts for more than 99% of total emissions across our value chain. To achieve net-zero, we must further increase the energy efficiency of our lighting. We must also advocate for the green energy transition to phase out fossil fuels and increase the use of renewable electricity in the world's grids. It is clear that without this transition, we won't be able to achieve our 2040 net-zero target.

Our Climate Transition Plan involves making further energy efficiency gains at our manufacturing facilities and offices and increasing reuse and recycling of Signify products and components when they have reached the end of their useful life.

But most of all, it is about producing and delivering ever more efficient LED lighting, which saves on energy use, reduces emissions, and lowers energy bills. We have made considerable advances in Ultra Efficient LED lighting, 50-60% more efficient than first-generation LED. We will encourage a faster shift towards these technologies, and a faster decline in global energy demand, by partnering with others to advocate for a 3% annual renovation rate of buildings globally.

We realize these changes will affect our suppliers, customers, and employees, as we decrease production of inefficient conventional lighting. We are committed to supporting them during the transition, ensuring that our products remain affordable, especially for those on low incomes. At the same time, we are convinced that our transition to net-zero will bring clear, long-term benefits.

Ambition

As part of our Climate Transition Plan, we have introduced ambitious emissions reduction targets; these targets have been reviewed and validated by the Science-Based Targets initiative (SBTi):

Net-zero target

Net-zero greenhouse gas emissions across our entire value chain by 2040

Near-term target

50% reduction in absolute scope 1, 2 and 3 greenhouse gas emissions by 2030

(compared with 2019 base year)

Long-term target

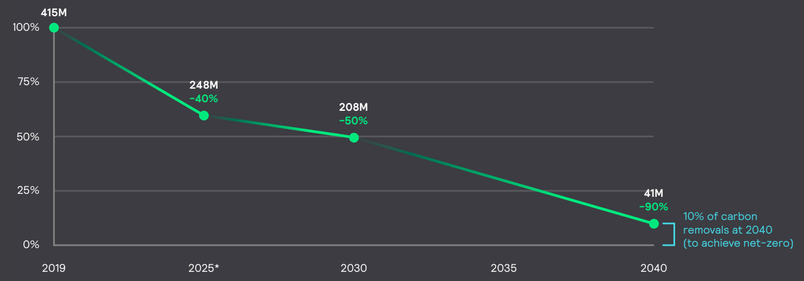
90% reduction in absolute scope 1, 2 and 3 greenhouse gas emissions by 2040

(compared with 2019 base year)

These targets build on progress made under Signify's previous climate action plans. Since 2019, we have already reduced scope 1, 2 and 3 emissions[3] by approximately 50%, mainly by increasing our products' energy efficiency and by reducing energy use at our factories and offices. If successful, our Climate Transition Plan will increase this to 90% by 2040. To reach our net-zero target, we are committed to eliminating the residual 10% through carbon removals; Signify has a track record in financing carbon removals and sequestration through nature restoration.

Achieving net zero by 2040

(scope 1, 2 and 3 emissions, tCO_2e)



*Signify's 2025 emissions target was set in 2020 as part of the company's *Brighter Lives, Better World 2025* program. In 2023, we surpassed this target, thanks mainly to quicker-than-expected improvements in energy efficiency across our product portfolio and accelerated phasing-out of less efficient conventional lighting. We expect these factors to drive further reductions in emissions throughout our value chain. Gains in energy efficiency are likely to slow down after 2025, but will still account for 10% of emissions reduction through to 2030. After that date, we expect an acceleration in the global transition to renewable energy, resulting in a further 40% reduction in emissions by 2040.

Setting science-based targets

It is important that we set science-based emissions reduction targets – i.e., that our targets are in line with what is required to achieve the Paris Agreement 1.5°C objective, according to the latest climate science. In fact, our Climate Transition Plan will put Signify ten years ahead of the 1.5°C objective, which implies net-zero emissions by 2050. Setting science-based targets also makes sense for us as a business – it will encourage innovation and demonstrate to employees and customers alike Signify's long-term commitment to sustainability. In 2018, Signify became one of the first companies to commit to verified science-based targets in line with the Paris Agreement 1.5°C target.

[3] Throughout this document, we use definitions for scope 1, 2 and 3 emissions as set out in the Greenhouse Gas Protocol. Scope 1 refers to emissions from sources owned or controlled by the company, scope 2 to emissions from purchased electricity consumed by Signify and scope 3 to indirect emissions resulting from our activities either upstream in our supply chain or downstream through the use of our products. For more information, see www.ghgprotocol.org.

Signify's current greenhouse gas emissions

Across our value chain, most greenhouse gas emissions – more than 99% – come from the product use phase (i.e., when our products and lighting systems are in operation). The remaining emissions stem either from Signify's own factories and offices and operations, or from the company's supply chain – essentially from the materials we buy to manufacture our products, transportation of these materials, and end-of-life treatment of products.

Greenhouse gas emissions across our value chain (based on 2023 data)

0.4%
Upstream value chain

0.1%
Our own operations

99.5%
Downstream value chain

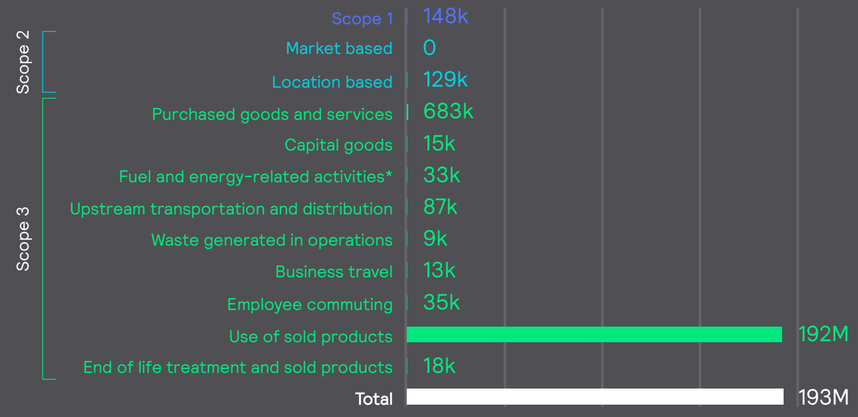
Upstream value chain includes purchased goods and services, capital goods and upstream transportation and distribution (scope 3).

Our own operations include fuel and energy-related activities, waste generated in our operations, business travel and employee commuting (scopes 1, 2 and 3).

Downstream value chain includes use of sold products and end-of-life treatment of sold products (scope 3).

Signify's scope 1, 2 and 3 emissions

(tCO$_2$e, based on 2023 data)



*Not otherwise included in scopes 1 or 2

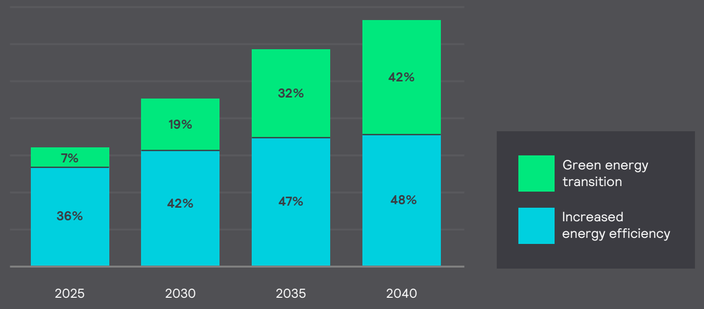
The chart above is based on emissions scopes and categories, published in the Greenhouse Gas Protocol. We have excluded six scope 3 categories as not applicable to Signify: upstream leased assets, downstream transport and distribution (included in upstream transportation and distribution), processing of sold products, downstream leased assets, franchises and investments.

With most emissions outside our operations, we have two main drivers to achieve our net-zero ambition:

- First, to further improve the energy efficiency of our products – this will help reduce energy consumption and support our customers' decarbonization goals
- Second, to advocate for a green energy transition – this means working with governments, business and other stakeholders to increase the use of renewable energy in the world's power grids

Over time, this second driver will become more important. By 2040, we expect over 40% of our emissions reduction will come from the transition to renewables as more of the installed base globally is converted, over time, to energy-efficient lighting.

Net-zero drivers



The chart above shows expected percentage reduction in greenhouse gas emissions by driver (increased energy efficiency/green energy transition), leading to 90% emissions reduction across Signify's entire value chain by 2040, in line with our net-zero ambition.

Decarbonization scenarios

In developing our Climate Transition Plan, we mapped out four different decarbonization scenarios, based on the IEA's Net-Zero Roadmap (2023 update) and the sixth IPCC Assessment Report. These scenarios range from average global warming of 1.5°C to 4.4°C – and clearly show that achieving net-zero will depend on further climate action by government and business, particularly in accelerating the transition to renewables.

01 Net-zero emissions scenario

The world reaches net-zero emissions by 2050, limiting global warming to 1.5°C.

Based on: 70% renewable electricity by 2030.

100% renewable electricity in developed economies in 2035, in China by 2040 and in other emerging economies after 2040.

02 Announced pledges scenario

All government targets are met as announced, resulting in warming of 2.1°C.

Based on: 60% renewable electricity by 2030, rising to 80% by 2040.

03 Stated policies scenario

Current policies continue unchanged, resulting in warming of 2.4°C.

Based on: 55% renewable electricity by 2030, rising to 65% by 2040.

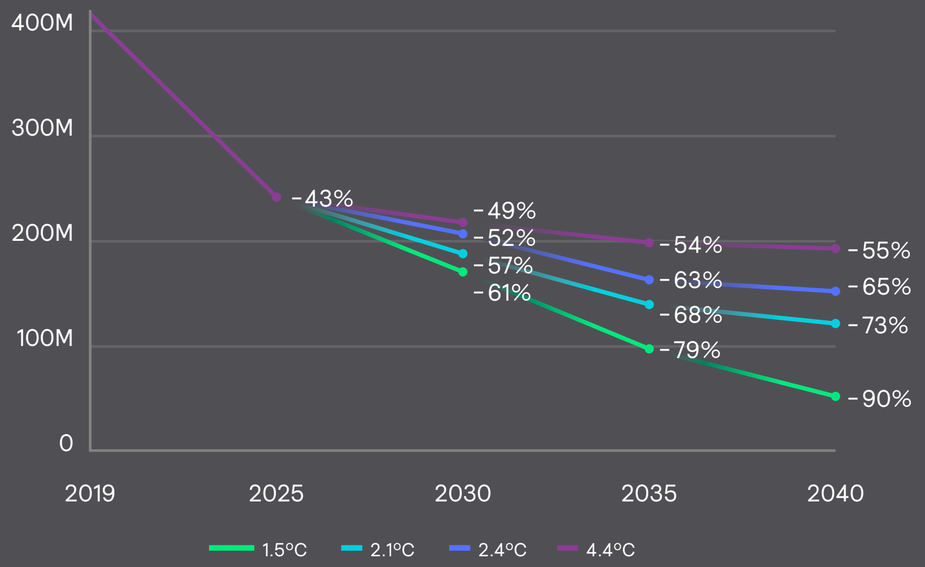
04 Business as usual scenario

No further climate action is taken, resulting in warming of 4.4°C

Based on: 40% renewable electricity from 2025 to 2040.

In line with the sixth IPCC Assessment Report SSP5-8.5 scenario.

Our four decarbonization scenarios (tCO_2e)



See page 33 for more information on our decarbonization scenarios.

2 Action

To meet our net-zero target, we have put in place a series of initiatives and programs across our business and value chain. These involve, incentivizing suppliers to commit to renewable energy, electrification of the logistics fleet and last mile distribution, and further extending the use of LED – the single biggest factor in reducing the lighting industry's emissions in recent years.

Summary of action plan across Signify value chain

Upstream

Suppliers

Logistics

Scope 3

Signify operations

Factories

Offices

Travel and commuting

Scope 1 & 2

Downstream

Product use

End-of-life treatment

Scope 3

Suppliers
−0.7% CO_2

- Supplier sustainability program
- Green procurement strategy
- Power purchase agreements (PPA) for suppliers

Logistics
−0.03% CO_2

- Electrification of logistics fleet
- Increase energy efficiency and decarbonize modes of transportation
- Sustainable fuels

Operations
−0.04% CO_2

- Source 100% electricity from renewables
- Increase renewable electricity from PPAs
- Increase energy efficiency
- LEDification, retrofit own facilities

Travel and commuting
−0.02% CO_2

- Sustainable travel policy, partnership and fuels
- Augmented reality to avoid physical travel
- 100% EV or hybrid leased cars fleet

Use phase
−88% CO_2

- Ultra Efficient LED
- Decouple growth and emissions
- Advocate for acceleration of global renewable transition
- PPAs for customers

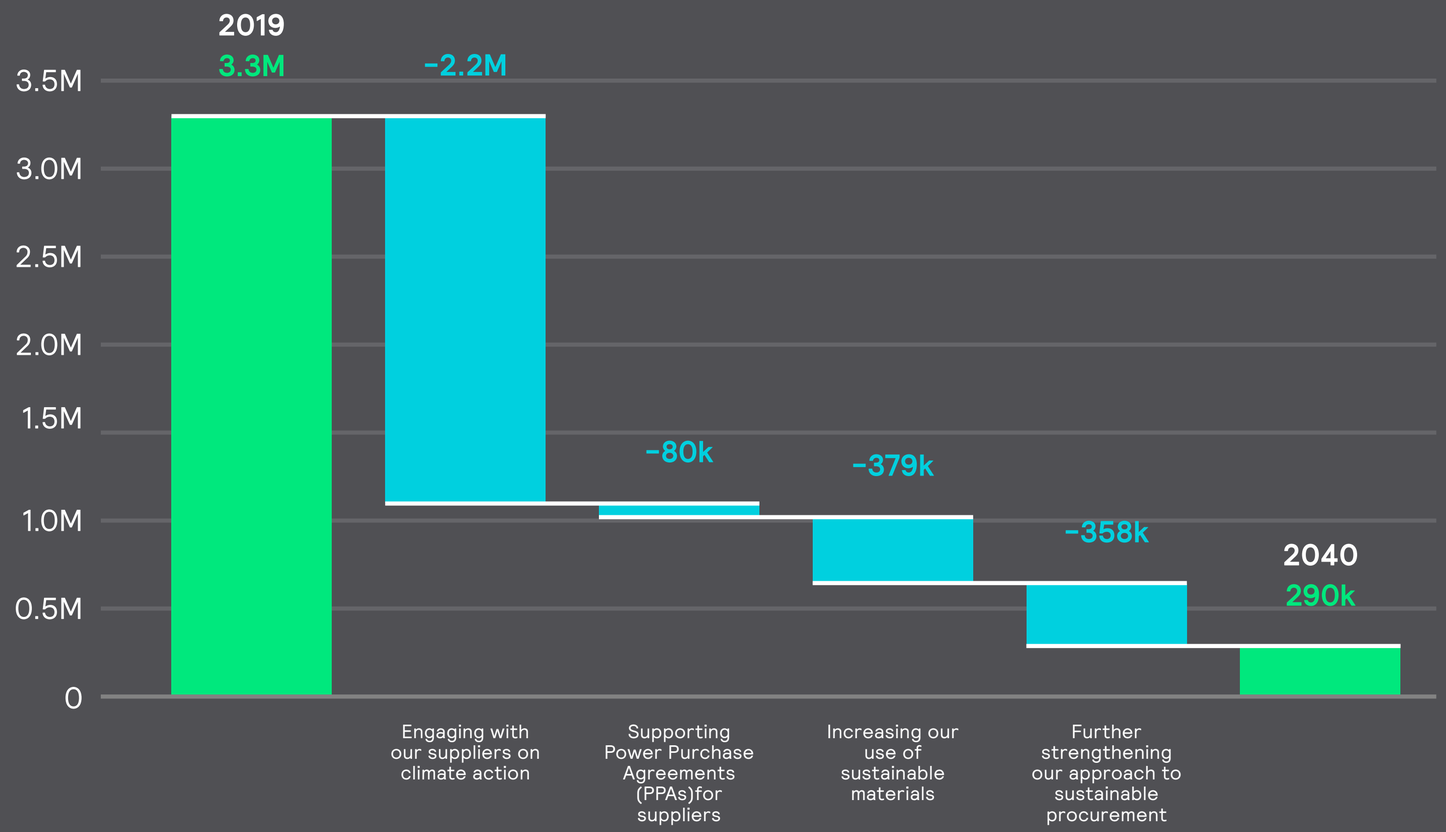
End of life
−1.1% CO_2

- Reuse, recycle
- Boost circular lighting portfolio
- Reduce waste and emissions from end-of-life treatment
- Packaging redesign

2.1 Suppliers

By 2040, we plan to reduce greenhouse gas emissions from our suppliers by just over 91%. This will be done mainly by engaging with suppliers, incentivizing them to take climate action, reduce emissions and switch to renewable energy. Where possible, we will also increase our use of alternative, low-carbon materials and integrate carbon costs into our procurement decisions.

Planned reduction in emissions (tCO_2e)



Figures have been rounded to nearest million or 1,000, and may not tally due to rounding.

2.1 Suppliers action plan

Actions	How will we reduce emissions?	Implementation timeline	By how much will this reduce emissions?

Engaging with our suppliers on climate action	• Incentivize suppliers through Tritium* to:
	  • Commit to climate action and set ambitious science-based emissions reduction targets
	  • Increase their use of renewable energy and set goals (using RE100 as a basis)[4]
	• Favor suppliers who take action on climate and drive further emissions reductions
	*Tritium – Signify's supplier rating system – works by rewarding those suppliers taking climate action.
		2024-2028	2.2M tonnes
			0.53%

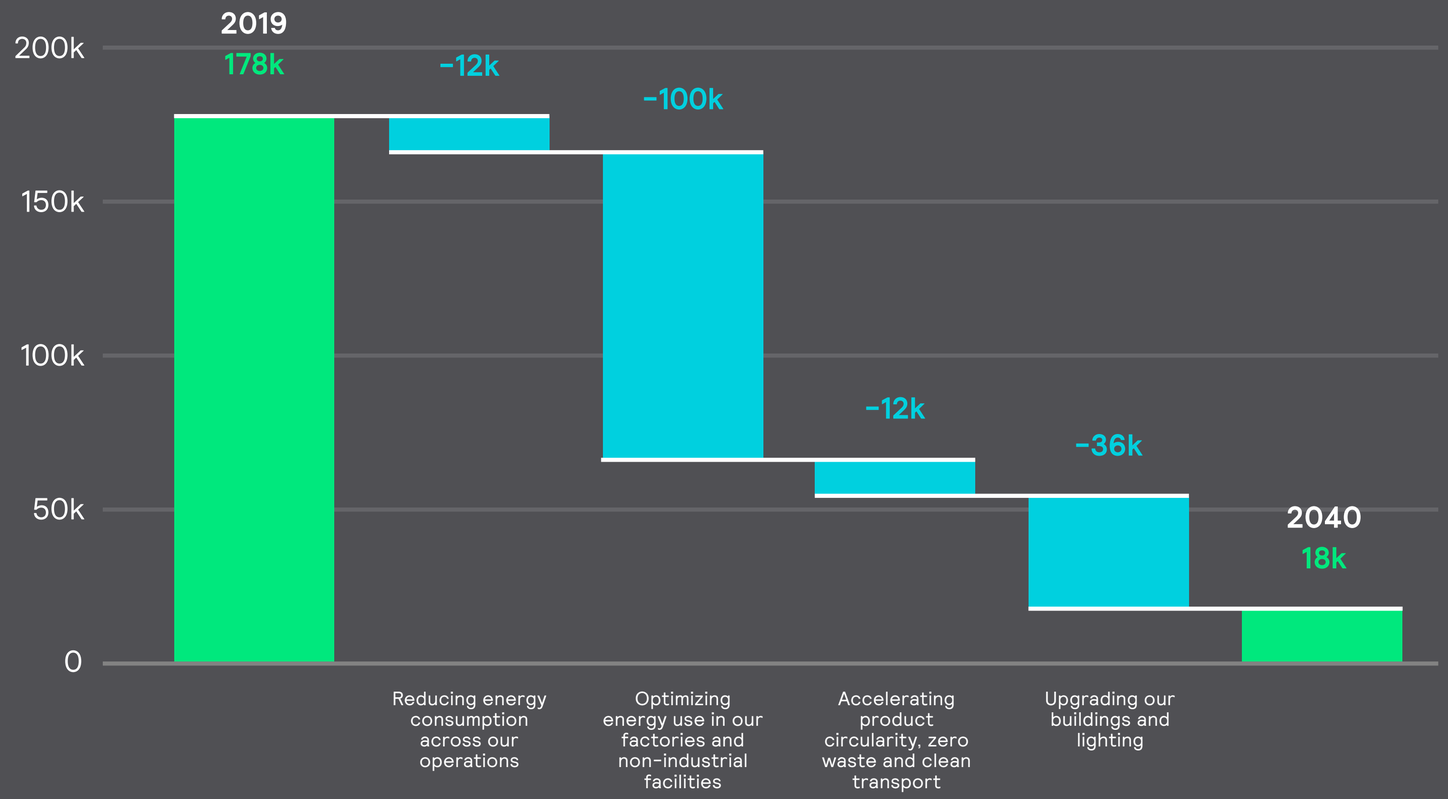
Supporting PPAs for suppliers	• Support suppliers in initiating new PPAs, prioritizing regions with large numbers of Signify suppliers and working closely with other buyers	2025-2030	80k tonnes 0.02%
Increasing our use of sustainable materials	• Redesign products and packaging to use less carbon and energy-intensive materials • Increase the percentage of recycled content in our products and exploring low-carbon alternatives (such as bio-circular materials)	2024-2035	379k tonnes 0.09%
Further strengthening our approach to sustainable procurement	• Integrate carbon costs into procurement policy and decision-making • Choose suppliers with net-zero or low emissions, and buy sustainable materials as the default option	2030-2040	358k tonnes 0.09%
Challenges and dependencies	We work with thousands of suppliers; who operate at different levels of maturity in both their understanding and management of climate issues. Sourcing alternative, low-carbon materials may prove challenging because of availability, cost or even suitability. PPAs provide a clear pathway to decarbonization, but pricing structures vary and may not always be clear to all suppliers.		

[4] RE100 is a global initiative bringing together companies to work toward 100% renewable electricity. For more information, see www.there100.org.

2.2 Operations

Our own factories, offices and other sites account for only a fraction of our total greenhouse gas emissions. Since 2010, we have reduced our operational carbon footprint by almost 80%. Under our Climate Transition Plan, we will go further, upgrading our buildings, accelerating circularity initiatives and optimizing our processes to reduce overall energy consumption.

Planned reduction in emissions (tCO_2e)



Figures have been rounded to nearest million or 1,000, and may not tally due to rounding.

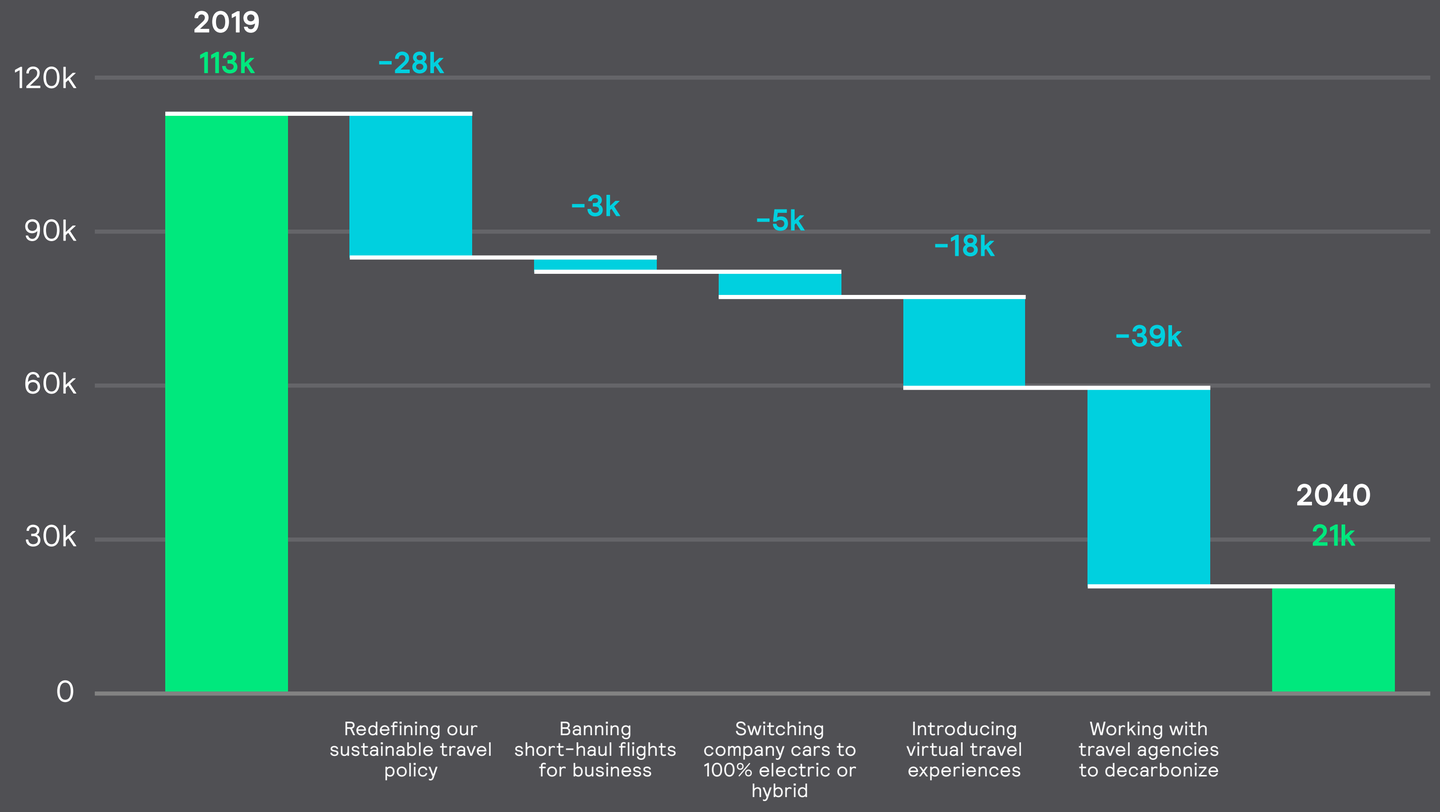
2.2 Operations action plan

Actions	How will we reduce emissions?	Implementation timeline	By how much will this reduce emissions?
Reducing energy consumption across our operations	• Reduce energy use through heating and air conditioning and by using timers for auto shutdowns prior to the end-of-work shifts • Involve operators in identifying opportunities to further reduce consumption and step up zone-by-zone monitoring at factories and other sites	2024-2027	12k tonnes 0.003%
Optimizing energy use in our factories and non-industrial facilities	• Reduce our reliance on natural gas and energy-intensive processes • Insulate machines and reuse heat generated by chimneys and other equipment • Replace old, inefficient machines and optimize maintenance to reduce energy use and prevent leakage • Reduce waste from industrial processes, including wastewater, and recycle where possible • Power-down unused equipment and shut off during unplanned stoppages • Optimize other processes, including painting and battery recharging, particularly with material handling systems and power tools	2024-2027	100k tonnes 0.02%
Accelerating product circularity, zero waste and clean transport	• Design products for easy disassembly and eliminate glue – or find alternatives – to avoid baking for hardening etc. • Encourage greater circularity across all product lines and develop action plans to mitigate products' climate impact • Increase the use of 3D printing of plastic components (using recyclable plastic) • Optimize transport of Signify products (e.g. making better use of space in vehicles, taking fuel-efficient routes and introducing EVs for last-mile delivery)	2024-2027	12k tonnes 0.003%
Upgrading our buildings and lighting	• Install more energy-efficient LED lighting, motion detectors and make use of alternative energy sources where possible • Increase our use of PPAs and on-site generation through solar panels at our factories, offices and other facilities	2024-2027	36k tonnes 0.01%
Challenges and dependencies	Switching to renewable energy may be challenging at smaller, more remote sites (which may be also rented rather than owned by the company). In addition, sourcing alternative materials will depend on their availability and potential return on investment. Other measures, such as product redesign and installing new equipment, will require investment and support from external suppliers.		

2.3 Travel and commuting

We are taking a more sustainable approach to business travel. By 2040, we expect to reduce emissions from travel and employee commuting by more than 80%. We will do so by updating our travel policy to introduce a stricter approval process, banning short-distance flights and switching company lease cars to electric or hybrid.

Planned reduction in emissions (tCO_2e)



Figures have been rounded to nearest million or 1,000, and may not tally due to rounding.

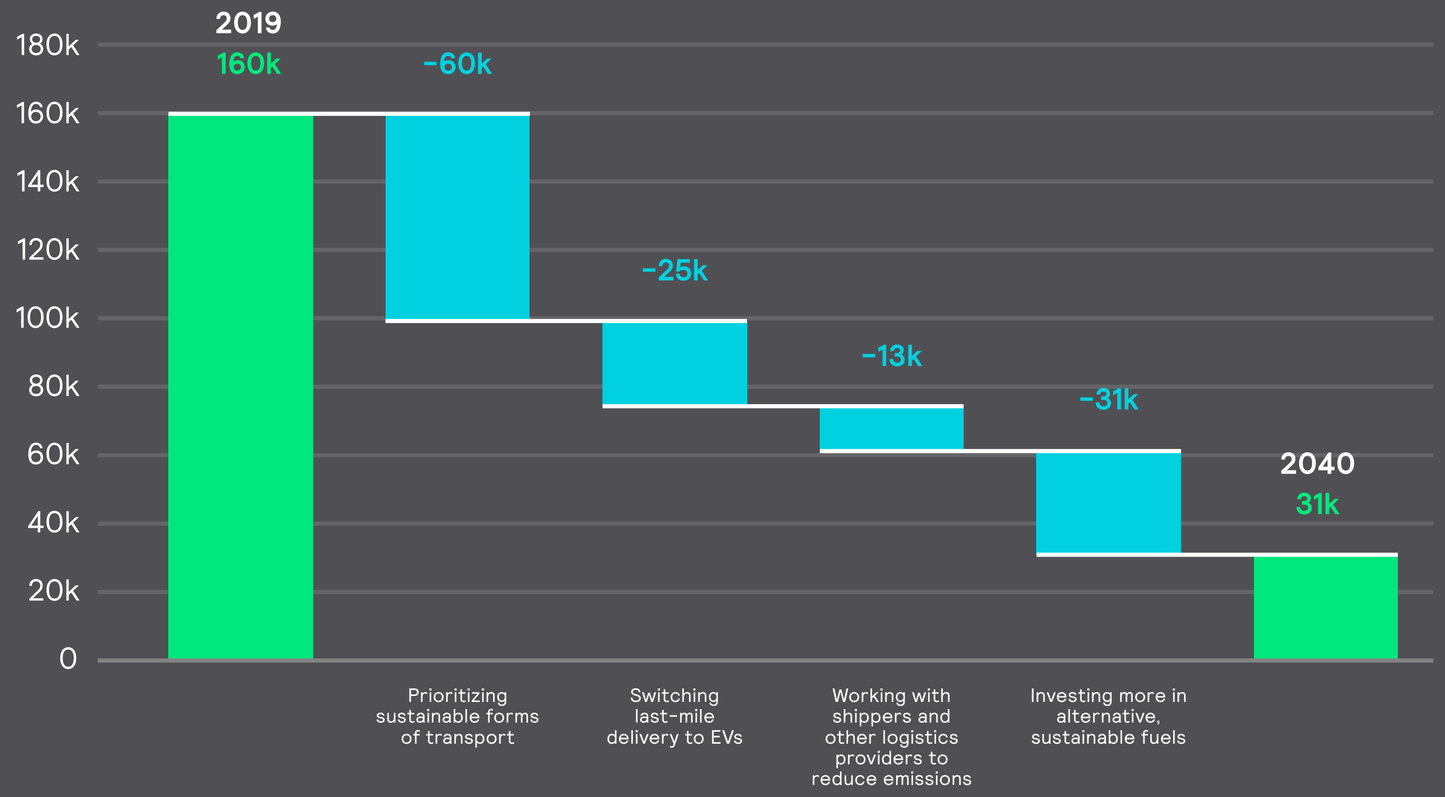
2.3 Travel and commuting action plan

Actions	How will we reduce emissions?	Implementation timeline	By how much will this reduce emissions?
Taking a more sustainable approach to business travel and commuting	• Update our travel policy to introduce a stricter approval process and ban short-distance flights • Switch company lease cars to 100% electric or hybrid, and provide incentives for employees to use more sustainable forms of commuting	2025-2028	36k tonnes 0.01%
	• Work with travel agencies to reduce emissions, invest in alternative fuels (particularly for air travel), and use AI to provide virtual travel	2028-2040	57k tonnes 0.01%
Challenges and dependencies	In changing our approach to travel, we may need to set a specific CO_2 budget, define exceptions and overhaul our current travel booking system. In some countries, there is still a lack of charging infrastructure, which may delay the introduction of company EVs.		

2.4 Logistics

Logistics greenhouse gas emissions are mainly in shipping materials to our factories and in transporting finished products to customers. We will work to reduce these emissions by opting for more sustainable forms of transport, favoring ocean and rail freight, for example, as well as working in partnership with shippers and rail haulers, and investing in cleaner, alternative fuels.

Planned reduction in emissions (tCO_2e)



Figures have been rounded to nearest million or 1,000, and may not tally due to rounding.

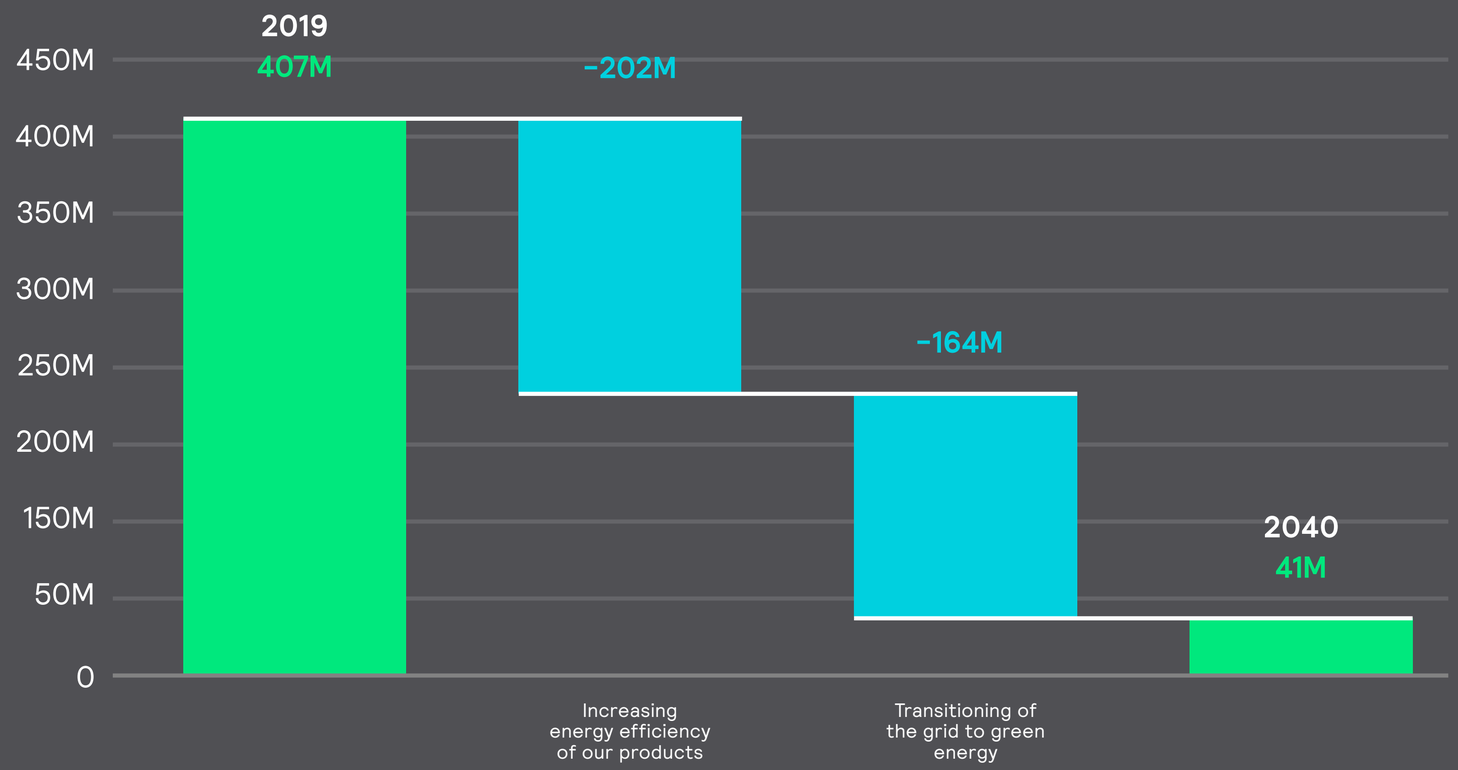
2.4 Logistics action plan

Actions	How will we reduce emissions?	Implementation timeline	By how much will this reduce emissions?
Prioritizing sustainable forms of transport	• Favor cleaner ocean or rail freight, particularly between ports and our distribution centers • Use EVs for last-mile distribution of our products • Design products to optimize weight and volume for more efficient shipping • Improve reporting, use more data from shippers, and identify emissions hotspots for possible improvements	2024-2030	85k tonnes 0.02%
	• Invest in alternative, sustainable fuels for transport • Use low emissions as one of our selection criteria for shippers, make use of zero-emissions zones at customer sites and work with logistics providers to reduce emissions	2030-2040	44k tonnes 0.01%
Challenges and dependencies	As with travel and commuting, we face uncertainties over the availability of charging infrastructure, as well as the cost of biofuels, given the likelihood that demand for these fuels will increase as more companies look for alternatives to diesel.		

2.5
Use phase

As we have seen, most greenhouse gas emissions come from the use phase of our products. To reach net-zero, we will continue to improve our products' energy efficiency. This will help drive continued innovation and allow us to progressively decouple business growth from emissions. We can't achieve net-zero through energy efficiency alone, however. We will also work closely with governments and businesses to accelerate the global transition to renewable electricity.

Planned reduction in emissions (tCO_2e)



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2.5 Use phase action plan

Actions	How will we reduce emissions?	Implementation timeline	By how much will this reduce emissions?
Increasing energy efficiency of our products	• Continue to phase out conventional lighting and replace it with more energy-efficient LED* • Introduce more solar lighting and enhance energy savings with smart, connected lighting • Expand our portfolio of ultra energy-efficient indoor, outdoor and residential lamps, as well as luminaires • Work with government and business to double annual infrastructure renovation rates to speed up replacement of conventional lighting with more energy-efficient alternatives • Use Environmental Product Declarations (EPDs) to quantify our products' climate impact and use this as a foundation for sustainable innovation and product design for emissions reduction *LED reduces energy consumption by around 50%, but that figure rises to 80% with connected LED. Connected LED is a system using Internet of Things (IoT) technology to connect LED lighting devices to a network: lights may be remotely controlled, monitored, and optimized through a management system. Connected lighting solutions are designed to provide a range of benefits, such as energy savings, improved user experience and enhanced safety and security.	2024–2030	202M tonnes 49%
Transitioning of the grid to green energy	• Advocate an acceleration in the transition to renewable energy and net-zero electricity with government and business • Encourage PPAs among customers, suppliers and other business partners as an effective way of decarbonizing the energy sector • Extend our own PPAs to increase our use of renewable electricity See page 28 for more information about our approach to advocacy.	2030–2040	164M tonnes 39%
Challenges and dependencies	Around 88% of our planned emissions reduction through to 2040 will come from the use phase. Ultimately, success will depend on the wider transition to renewable energy. To ensure this, governments will need to provide effective incentives and make good on pledges under the Paris Agreement. We can still improve energy efficiency through innovation, though this is likely to become less significant over time as more conventional lighting is converted to LED. Continued expansion in fossil fuel production, particularly in response to current energy security concerns, may also slow the switch to renewables.		

2.5 Use phase

Switching to Ultra Efficient lighting will further reduce use phase emissions

We are continuing to expand our range of Ultra Efficient LED lighting; these lights are 50-60% more efficient than first-generation LED. As a result, they save on energy use, reduce emissions and help bring down household energy bills.

We launched our first, breakthrough Ultra Efficient LED lightbulb in 2021. The Ultra Efficient range expanded with new indoor and outdoor luminaires in 2022. And In 2023, we added Ultra Efficient outdoor solar lights for consumers, plus Ultra Efficient solutions for roads and hospitality to our product range. Now our Ultra Efficient portfolio consists of indoor, outdoor and residential lighting.

Expanding Ultra Efficient LED lighting will help reduce carbon emissions from the use phase of our products across the full value chain.

Ultra Efficient lighting also brings other benefits. These Ultra Efficient products last longer on average than the traditional LED equivalent – up to 50,000 hours – while achieving the same light output and quality. In addition, they meet the most stringent EU ecodesign and energy labeling criteria. Overall, that means less use of materials and less waste.

Because it lasts longer and uses less energy, Ultra Efficient lighting offers households significant cost savings – important at a time of rising energy prices. We estimate that an average household switching from old-style incandescent lighting could save as much as EUR 14,000 over their product's lifetime.[5]

Signing power purchase agreements to accelerate transition to renewable power

Increasingly, we are supporting the renewable energy transition via PPAs. We now have three virtual PPAs (vPPAs) in place in the US, Poland and Finland – these agreements give us access to renewable electricity, reduce our emissions and help transition national electricity grids to more sustainable forms of power. Around 37% of our renewable electricity now comes from vPPAs. Our latest agreement in Finland went live in 2023.

- We signed our first vPPA in the US in 2018, sourcing electricity from a wind farm in Texas and allowing us to switch to 100% renewable electricity across our US and Canadian operations.
- In Poland, we were the first to sign a corporate vPPA in 2019, a ten-year agreement, under which we are sourcing renewable power from the Kisielice wind farm, around 200 kilometers north of Warsaw for Signify production facilities and offices across Poland. The agreement helps reduce the country's reliance on coal; nearly three-quarters of Poland's electricity is still generated from coal and other fossil fuels.[6]
- In Finland, Signify signed the first cross-border pan-European vPPA as part of a consortium, also involving Heineken, Philips and Nouryon (now Nobian). Under our vPPA, we supported the financing of 35 new wind turbines, adding 330 GWh of renewable power to Finland's national electricity grid and saving more than 230,000 tonnes of CO_2e per year. The wind turbines came into service, as scheduled, in 2023.

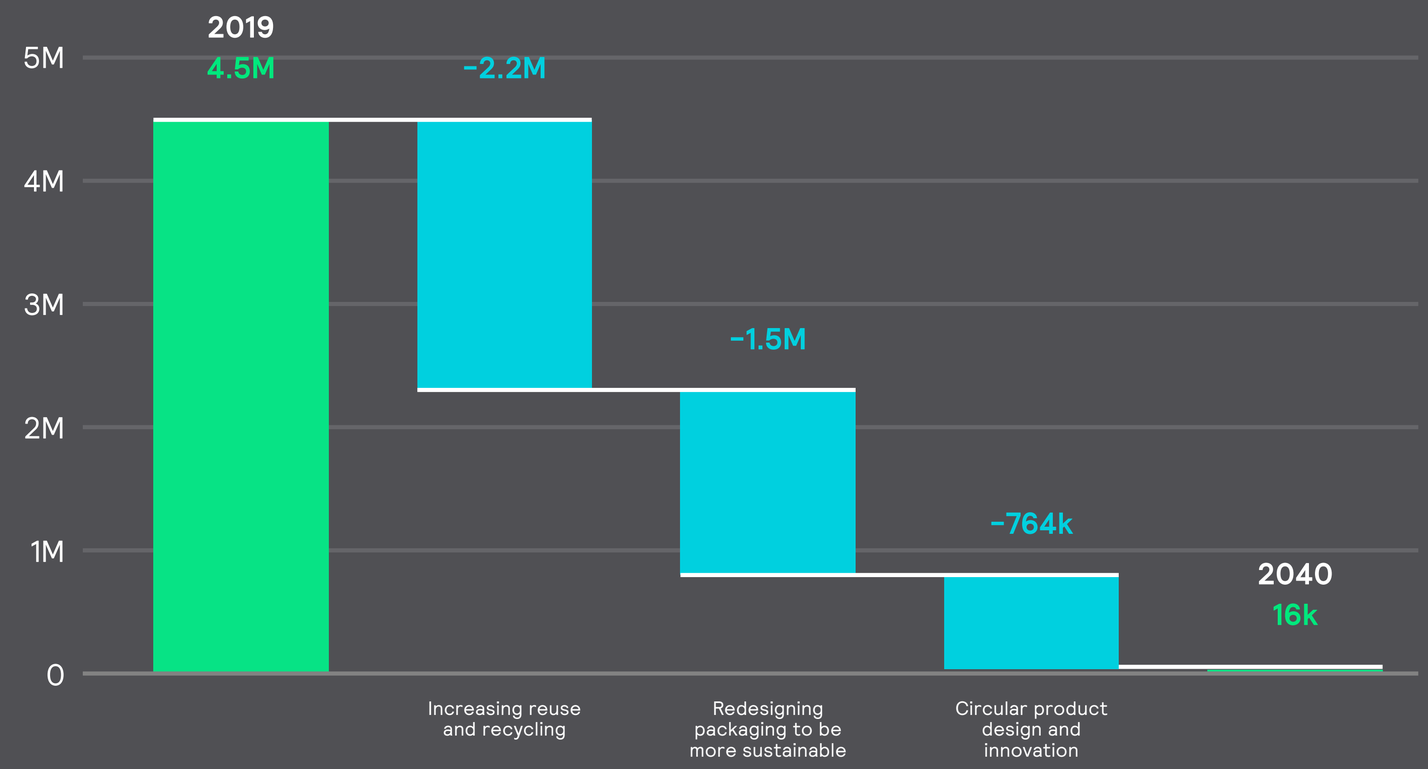
[5] Source: Signify

[6] Source: Ember

2.6
End of life

By moving to a more circular approach, we will reduce both waste and our reliance on increasingly scarce natural resources. We will do this by encouraging reuse, recycling and remanufacture. Initiatives are already underway to redesign our packaging and further embed circularity into initial product development. By 2040, we expect to reduce more than 99% of emissions from our products' end-of-life phase.

Planned reduction in emissions (tCO_2e)



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2.6 End of life action plan

Actions	How will we reduce emissions?	Implementation timeline	By how much will this reduce emissions?
Increasing reuse and recycling	• Expand our circularity program, reduce waste, increase “re-usability” of our products and harvest spare parts from products at the end of their useful life • Increase 3D printing of lighting products, based on recycled plastics and other bio-circular materials	2024-2030	2.2M tonnes 0.5%
Redesigning packaging to be more sustainable	• Reduce the amount of packaging required, use of emissions-intensive materials and encourage recycling • Phase out plastic packaging in consumer products and favor lighter and smaller packing, leading to emissions reduction of around 6,000 tonnes CO_2e a year	2024-2030	1.5M tonnes 0.4%
Circular product design and innovation	• Integrate circular design into our product development to prolong the lifetime of new products and reduce end-of-life emissions • Make our products more serviceable and upgradable, so they last longer once in use and can be improved by performance upgrades and new functionalities	2024-2035	764k tonnes 0.2%
Challenges and dependencies	In many countries, there is a shortage of adequate infrastructure for collecting and recycling. Many products currently in use do not have circular principles built into their manufacture, limiting their recyclability. Success will also depend on our ability to establish effective reuse and recycling streams within our business.		

2.7 Risks and opportunities

Climate change brings both risks and opportunities for our business. We manage these essentially through our Climate Transition Plan and our Brighter Lives, Better World 2025 sustainability program.

Climate-related risks fall into two main categories:

- Physical risks caused by climate change – e.g., extreme weather events such as floods or hurricanes
- Transition risks caused by the climate transition – i.e., the shift away from fossil fuels and toward more sustainable forms of business

Physical risks may affect our factories, warehouses, and distribution centers, as well as disrupting supply chains and resulting in higher material prices. Our climate risk assessment shows that just under a quarter of our sites may be at risk, over time, of riverine flooding (see table on the pages 25-26).

We are well prepared for extreme weather events, however. We have detailed business continuity plans in place to minimize disruption to our production, employee working, sourcing or product deliveries.

Transition risks, meanwhile, can be turned into significant opportunities for Signify as the global leader in energy-efficient and low-carbon lighting. As part of our sustainability program, we have expanded our portfolio of energy-efficient products and systems, worked to reduce greenhouse gas emissions throughout our value chain, and extended reuse and recycling where possible.

These efforts will also help us meet stricter environmental performance standards, lessen our reliance on scarce natural resources and reduce our exposure to variations in carbon prices.

In the table below, we have set out our main climate-related risks, opportunities and impacts over the short, medium and long-term. For more information, see Signify's Annual Report 2023 and Sustainability Supplements to the Annual Report.

2.7 Transition risks and opportunities

	Potential impact	Short term (2025)	Medium term (2030)	Long term (2050)
Policy and legal changes	Higher operating and production costs may result from the introduction of new carbon pricing, taxes and trading schemes.			
	Changes in regulation may spur additional demand for energy-efficient products.			
Technology	Less energy-efficient products may need to be phased out in line with stricter energy performance standards.			
Market	Concerns over energy security may lead to increased demand for energy-efficient lighting.			
	Increased customer awareness of the challenges of climate change will result in revenue growth.			
	Suppliers may be affected by extreme weather events (e.g., floods and hurricanes), disrupting supply chains and leading to increased raw material costs.			
	Continued progress on sustainable design and innovation will give us access to new markets.			
	Government policies, such as the European Green Deal or American Jobs Plan, will lead to additional demand for energy-efficient and low-carbon products.			
Reputation	Clear, credible and transparent reporting of emissions and climate impact will further strengthen Signify's brand and reputation.			
Resource efficiency	Operating costs may be reduced through more efficient production processes, while lower emissions will decrease Signify's exposure to variations in carbon prices.			
	Increased water pricing may drive up production costs in the medium and long-term as water becomes scarcer due to climate change.			
Products & services	Signify's reputation will grow as the company expands its portfolio of energy-efficient and low-carbon products.			
	Through continued innovation, Signify will develop new products to meet demand for greater energy efficiency, increasing the company's revenues.			
	A shift in consumer preferences will lead to growing demand for low-carbon products resulting in increased revenues.			
Resilience	Switching to renewable energy will lower Signify's exposure to future increases in prices for fossil fuels.			
	In its work, Signify's Climate Risk Assessment Taskforce will reduce exposure to climate risks and increase the company's resilience to the effects of climate change.			

Opportunity (High) | Opportunity (Medium) | Opportunity (Low) | Risk (low) | Risk (Medium) | Risk (High)

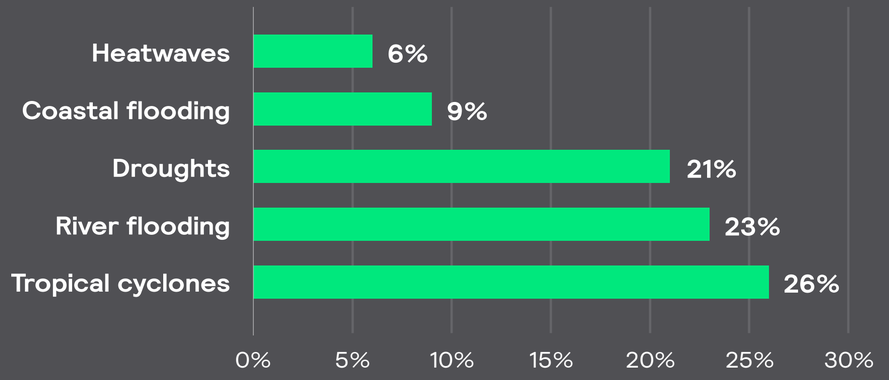
Our assessment is in line with the IEA Below 2°C and IEA 450 scenarios. These scenarios suggest increased adoption of renewable energy, continued improvements in energy efficiency and increasingly stringent environmental regulation and government policies to stimulate the energy transition and take-up of low-carbon technologies.

To assess impact over the short, medium and long-term, we made the following assumptions:

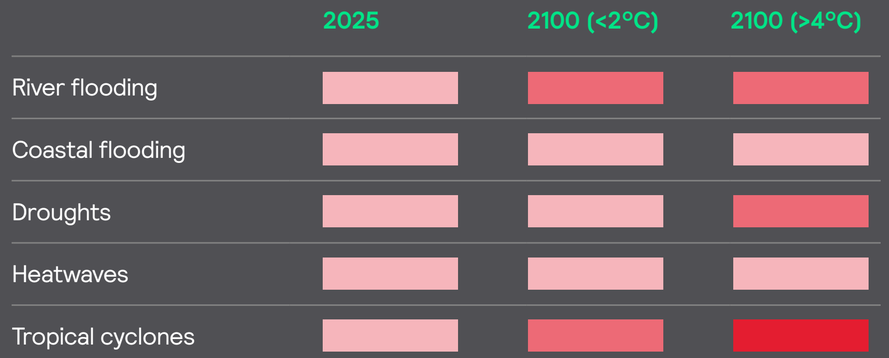
- Regulatory requirements concerning energy efficiency in lighting would continue to vary by country and jurisdiction
- There would be no significant erosion in prices and margins
- Signify would maintain its current market share in the lighting industry
- There would be increased demand for lighting, based on current forecasts for population growth, urbanization and GDP growth, as well as market intelligence

2.7 Risks and opportunities physical risks

Percentage of sites potentially affected



Potential risks to sites



The charts above shows main physical risks to Signify's factories, warehouses, distribution centers and other sites. We evaluated one short-term (2025) and two long-term (2100) scenarios in line with the sixth IPCC Assessment Report: a below 2°C (SSP1-2.6 scenario – taking the sustainable road), and an above 4°C (SSP5-8.5 scenario – fossil fueled development path). We expect risk to remain low in the short term, though it will begin to increase if temperature rises exceed 2°C. We keep contingency and business continuity planning under constant review, particularly for sites at higher risk in the long term.

Assessments and governance of risks and opportunities

Signify carries out regular assessments of climate-related risks and opportunities. In 2020, we set up a Climate Risk Assessment Taskforce team to oversee this process. The team brings together company experts from operations, insurance, risk, internal audit, sustainability and Environment, Health and Safety (EHS), and is integrated into risk management and business control.

Our assessments address short, medium and long-term impacts, and follow recommendations from the Task Force for Climate-Related Financial Disclosures (TCFD), covering governance, strategy, risk management and metrics and targets. For the purposes of this Climate Transition Plan, we conducted detailed scenario analysis (based on four decarbonization scenarios, ranging from 1.5°C to 4.4°C – see page 33). Climate issues are also discussed at our annual risk workshop, held to identify Signify's main risks and opportunities for the year ahead.

2.8 Investments and business models

Since 2021, Signify has been tracking its investments in sustainability and climate action as part of the company's reporting under the EU Taxonomy for Sustainable Activities.

These investments include:

- Capital expenditure (purchasing equipment for LED production and to make our factories and other facilities more energy efficient, as well as lease contracts for new and/or renovated buildings)
- Operating expenditure (investment in innovation, research, and development to further improve the energy efficiency of our product portfolio and support greater circularity)

In 2023, we invested EUR 271 million in sustainable innovation which represents 88% of Signify R&D expenses. We believe that sustainable innovation will help create an increasingly future-proof and purposeful portfolio of products, systems, and services.

In the coming years, we expect to see a further increase in expenditure as we continue to invest in sustainable innovation. In 2021 and 2022, more than three-quarters of Signify's combined capital and operating expenditure was spent on activities contributing to climate change mitigation, as defined under the EU Taxonomy.[7] For 2023, this figure rose to 100% after transition to a circular economy was added to the taxonomy's eligibility criteria. Among industry peers, Signify has the highest percentage of capital and operating expenditure committed to taxonomy-eligible activities.[8]

[7] See table right: total taxonomy-eligible activities (A1+A2). Click here for more information on the EU Taxonomy for Sustainable Activities.

[8] Industry peers include Schneider Electric, Fagerhult, Royal Philips, Prysmian, Zumbotel, Trilux, Schréder, Siemens, ABB Group, Assa Abloy Group, KPN, ASML, A.P. Moller-Maersk, Ørsted, BASF and AkzoNobel.

Eligibility and alignment disclosures for turnover, CapEx and Opex

	2021			2022			2023		
	Turnover	CapEx	OpEx	Turnover	CapEx	OpEx	Turnover	CapEx	OpEx
Taxonomy-eligible and aligned (A.1)	n/a	n/a	n/a	11%	12%	11%	8.5%	8.6%	7.2%
Climate Change Mitigation	n/a	n/a	n/a	11%	12%	11%	8.5%	8.6%	7.2%
Transition to a Circular Economy	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Taxonomy-eligible but not aligned (A.2)*	n/a	n/a	n/a	72%	71%	63%	91.5%	91.4%	92.8%
Climate Change Mitigation	n/a	n/a	n/a	72%	71%	63%	76.4%	77.8%	70.2%
Transition to a Circular Economy	n/a	n/a	n/a	n/a	n/a	n/a	15%	13.6%	22.6%
Total Taxonomy-eligible activities (A=A.1+A.2)	83%	85%	76%	83%	83%	74%	100%	100%	100%
Climate Change Mitigation	83%	85%	76%	83%	83%	74%	85%	86.4%	77.4%
Transition to a Circular Economy	n/a	n/a	n/a	n/a	n/a	n/a	98.2%	99.3%	100%
Total Taxonomy-non-eligible activities (B)	17%	15%	24%	17%	17%	26%	–	–	–

*In terms of sustainable revenues, currently 34% of Signify's global revenues come from the sale of circular products, systems and services (serviceable luminaires, circular components, intelligent systems and circular services), up from 16% in 2019. And 87% of revenues come from energy-efficient LED lighting today, up from 78% in 2019. Our 1.5°C decarbonization scenario is based on the assumption that revenues from energy-efficient LED lighting will constitute 100% of the company's sales in 2040.

Circular lighting

We have been working on a new circular business model for several years. We design products and parts to be reused, refurbished, and recycled to ensure the lighting system delivers maximum value. We maximize the lifetime of our luminaires through our services (such as maintenance) and, most importantly, flexibility. Circular lighting has a long lifetime, is energy efficient, serviceable, connectable, and upgradable.

3 Advocacy

Advocacy is a significant part of Signify's Climate Transition Plan. To reach net-zero, we need support from governments and businesses, particularly in converting power grids to renewables and incentivizing greater energy efficiency across our economies. This combination – renewables plus energy efficiency – will reduce carbon emissions, lessen our reliance on costly fossil fuels, reduce costs for households and companies, and create millions of local, clean energy jobs. We are working with like-minded organizations to drive policy change in these areas.

3.1 Policy advocacy

As the global leader in lighting, Signify advocates for climate action and energy efficiency. We have a long track record in climate action: in 2006, we called for the phasing out of inefficient incandescent lighting even though it accounted at the time for more than two-thirds of our sales volume. Our stance challenged many within the company and among stakeholders and peers; it also provided the foundation of Signify's industry leadership position today.

In 2022, emissions resulting from lighting still accounted for more than 2% of global greenhouse gas emissions[9], equivalent to those resulting from the aviation industry[10], but there is a huge opportunity for further rapid progress. Switching all the world's homes, businesses and cities to energy-efficient LED lighting would cut these emissions in half.[11] In doing so, we would free up more than enough electricity to charge every electric car currently on the road, or to power over 100 million heat pumps.[12]

In addition, Signify supports governments in their efforts to reduce greenhouse gas emissions, including EU and US plans to achieve net-zero by 2050. For example, our partnership with the UN Environment Program (UNEP) – En.lighten – works to phase out inefficient lighting in developing countries, including fluorescent lighting, which is now banned in the EU.[13] While progress has been made, we are conscious that conventional lighting still makes up a significant part of the lighting stock in the US and EU, and must be addressed to further reduce emissions from the industry.

3.2 Lobbying and trade associations

To promote policy change, we work closely with governments, cities and other businesses, as well as policymakers and experts. We are also members of trade associations and other organizations supporting the green energy transition, including the Corporate Leaders Group Europe, The Climate Group, the European Alliance to Save Energy and the World Green Building Council.

Signify is also a signatory to the We Mean Business Coalition's letter to Heads of State, which urged the phase out of fossil fuels, as well as separate letters from the Climate Group and the European Alliance to Save Energy calling for the EU Commission to set an emissions reduction target of at least 90% by 2040.

In addition, we have adopted a Responsible Advocacy Policy, setting out clear ground rules for our advocacy work. Under this policy, we do not make contributions to political parties or candidates. As a global leader in lighting, we must remain politically neutral and impartial.

For those associations where we are members, we commit to regularly review their public engagements on issues such as energy efficiency, climate policy and the global energy transition to ensure alignment with our own position on climate action.

3.3 Specific policy levers

Working with our partners, we advocate for two key policies, recommended by the IEA:[14] First, to manage the decline in fossil fuels while tripling global renewable energy capacity; second, to double the rate of energy efficiency improvements globally. To support this second recommendation, we are calling on governments – as part of the Renovation Revolution program – to double the rate at which we renovate buildings, street lighting and other infrastructure to at least 3%[15] annually. Renovation allows us to phase in more energy-efficient lighting, thereby reducing emissions and creating new jobs – in building management, for example, double glazing and installing new heating and air conditioning systems.

[9] Based on estimated IEA lighting emissions and estimated IEA global energy-related emissions

[10] Source: IEA

[11] Based on data from Signify's proprietary calculation model. See here for more detailed information, including underlying assumption and conversion rates used.

[12] Sources: Electric Vehicle Database, IEA Trends in electric cars and Viessman – do heat pumps use a lot of electricity?

[13] Since September 2023, fluorescent lighting has been banned in the EU, under the European Commission's Restriction of Hazardous Substances in Electrical and Electronic Equipment (RoHS). Signify is working separately with the Minamata Convention on Mercury to support a worldwide phase-out of fluorescent lighting by 2027.

[14] For more information on these recommendations, see the IEA's 2023 World Energy Outlook

[15] This rate refers to the number of buildings or other infrastructure undergoing renovation each year. Renovation rates vary by country, but across the EU average around 1-1.5%. The EU has said it wants to double the annual energy renovation rate for residential and non-residential buildings by 2030 as part of the new European Green Deal. Click here for further details of Signify's position on increasing the renovation rate.

4 Accountability

Over recent years, the market for conventional lighting has declined. As it has done so, Signify has shifted its business toward more energy-efficient and longer-lasting LED lighting. We endeavor to manage this transition responsibly – we ensure, for example, that our products remain affordable, particularly for those on low incomes. When our factories close, we also give suppliers time to adjust their production, and support former employees in finding new jobs.

4.1 Just transition

For our customers: Currently, many households and businesses are struggling with rising energy bills. We are committed to offering energy-efficient products at affordable prices while still making conventional products available to those customers least able to afford LED lighting. We also add value to products where possible – by including controls, for example, that allow customers to regulate lighting more easily, thereby reducing their energy costs. For businesses, we provide innovative solutions like Light-as-a-Service (LaaS), which gives companies access to the latest in lighting technology without the necessary capital outlay. In emerging economies, we work through the Signify Foundation to address energy poverty, installing lighting in hospitals, homes and local communities as part of our Brighter Lives commitment to light ten million lives by 2025.

For our suppliers: As we scale back conventional lighting, we realize that this directly affects our suppliers. When closing factories, we give suppliers as much notice as possible so, if necessary, they can gradually phase out production of materials, parts and components for Signify. We also explain our new requirements to suppliers to give them the opportunity, if able, to switch to supplying our LED factories.

For local communities: As we adjust production, we will continue to prioritize the local environment; we realize that soil and groundwater are precious resources. We apply circularity principles to local water use and restoration. As a matter of policy, we identify and investigate incidents of contamination – and, where necessary, take steps to redress any damage. When vacating sites, we return land to beneficial re use and avoid the use of greenfield locations to conserve the environment and biodiversity for the local communities.

For our employees: As the market for conventional lighting products has declined, we have reduced our workforce and closed several factories. In 2010, our conventional lighting business employed approximately 18,000 workers worldwide. By 2030, we expect that to be below 500. Inevitably, this means job losses. Where possible, we transfer employees to other jobs within Signify (particularly where, for example, they work at factories serving both our conventional and LED lighting businesses). We estimate that this accounts for around a quarter of employees affected by job losses in recent years. For other employees, we take a from work-to-work approach, helping them find new jobs outside Signify and supporting them in making the transition:

- We negotiate detailed social plans with works' councils, trade unions and other employee representative groups to provide job-to-job and financial support in line with local regulations
- Employees are also given advanced notice of factory closures and job losses – this depends on location, but generally ranges between 3-6 months. During that period, employees are granted time off to apply for new jobs and offered access to training and outplacement services

Around 80% of our former employees find jobs elsewhere within a relatively short timeframe. Signify has high standards in areas such as quality, safety and Lean methodology, and we find this helps employees in looking for new positions – 97% of our employees leave Signify with professional or specialist certification.

Overall, we support decent work and economic growth by creating a fair, inclusive workplace and providing development opportunities for both employees and suppliers. We also offer training and access to finance to entrepreneurs working in the lighting sector in developing countries. In recent years, the clean energy transition has created millions of new jobs and will continue to do so. According to the IEA, every USD 1 million spent on energy efficiency creates up to 15 new jobs.[16]

[16] Figures vary between 6 and 15, depending on the sector. Source.

4.2 Stakeholder consultation

We believe that stakeholder engagement and consultation should be part of any climate strategy. For this Climate Transition Plan, we solicited feedback from various stakeholder groups, including leading global climate associations, peer companies, customers, investors, and our own Works Council and Supervisory Board.

During this consultation, we received over 40 individual comments, leading to improvements in the quality and clarity of this plan, as well as generating discussion about the role of climate action as part of Signify's long-term corporate and commercial strategy.

Each year, internal and external stakeholders also take part in our sustainability double materiality assessment. During this process, stakeholders are invited to tell us which environmental, social, and governance issues they believe to be the most relevant ("material") for Signify, from both a financial and stakeholder impact perspective. This input directly drives the prioritization of sustainability topics within our broader strategy, including climate action.

4.3 Governance and reporting

Management: Management responsibility for climate-related issues lies essentially with Signify's Strategy, Sustainability & Marketing department. This department comprises several teams, including separate Sustainability and Environment, Health and Safety teams. Each team includes professionals at global, regional and local levels. Our Chief Strategy, Sustainability, & Marketing Officer also oversees our Climate Risk Assessment Taskforce.

Progress against our sustainability program (Brighter Lives, Better World 2025) is reviewed quarterly with members of Signify's Supervisory Board, Board of Management and Leadership Team. Progress is communicated both to employees and externally via our website and quarterly webcasts. Sustainability performance is included in long-term incentive payments for Board of Management members and the wider Leadership Team.[17]

Supervisory Board: Throughout the year, our Supervisory Board is updated on progress against our sustainability targets and initiatives. Sustainability is an inherent part of our broader 5 Frontiers strategy and, as such, is reviewed quarterly, with additional review upon request. In both 2023 and 2024, we discussed our Climate Transition Plan with the Supervisory Board, and the Board's newly-nominated Audit Committee Chair was part of the more in-depth stakeholder consultation process (see left).

In December 2023, Signify's Supervisory Board took part in an ESG training program to increase members' knowledge of sustainability and further strengthen its ability to provide advice to management. Sessions focused on sustainability reporting and strategy, the company's Climate Transition Plan and external assurance.

Currently, the Supervisory Board has two members with recognized expertise in sustainability: Jeroen Drost (Chairman of the Audit Committee) and Bram Schot (member and former CEO of Audi Group).[18] At Audi, Bram initiated the transition to EVs, giving him a thorough understanding of sustainability issues and challenges of the energy transition. As CEO of SHV Holdings, Jeroen was responsible for the company's ESG efforts.

Reporting: We report on our approach to climate-related issues through our Annual Report and Sustainability Supplements. To do so, we use reporting frameworks such as the Global Reporting Initiative (GRI), the TCFD and the Taskforce on Nature-Related Financial Disclosures (TNFD). We also report, as required, against the EU Taxonomy, our commitments to the UN Global Compact and the UN Sustainable Development Goals (SDGs).[19] This Climate Transition Plan also fulfills requirements under both the EU's Corporate Sustainability Reporting Directive (CSRD) and its Corporate Sustainability Due Diligence Directive (CS3D), due to come into effect in 2026 or 2027. Progress against this Climate Transition Plan will be regularly reviewed by Signify management.

[17] Vesting of 25% of long-term incentive grants depends on performance against Signify's sustainability targets, including those relating to climate.

[18] Signify's Supervisory Board has a defined Board profile: its members' expertise should reflect areas most relevant to the current transition in the lighting industry and the execution of the company's 5 Frontiers strategy. Other areas of expertise include industrial experience, finance, project/infrastructure, business transformation, digital, IT, innovation and cybersecurity.

[19] We report against those SDGs where we believe our business has the greatest (potential) impact, including: Good health & well-being (SDG 3), Affordable and clean energy (SDG 7), Decent work and economic growth (SDG 8), Sustainable Cities & Communities (SDG 11), Responsible consumption and production (SDG 12) and Climate action (SDG 13).

Conclusion

With this Climate Transition Plan, we are embarking on a new, ambitious path. It is also a necessary one. In the coming years, we will need that ambition if we are to successfully combat climate change and reach the goals set out in the Paris Agreement 1.5 °C pathway.

We believe in the green energy transition – in the benefits it will bring in terms of job creation and economic growth. But we also realize there are challenges and risks ahead, and that we need to manage these responsibly so the benefits of clean energy can be shared by the whole of society.

In this plan, we have also made it clear that Signify cannot achieve its net-zero target alone. For our part, we will commit resources to climate action. We will ensure there is sufficient investment in R&D, for example, to make the gains in energy efficiency we expect between now and 2040. We will also work closely with consumers, businesses and cities to help them phase out conventional lighting and replace it with more energy-efficient LED.

However, if we are to achieve net-zero, we will also need support from governments – to make good on their promises under the Paris Agreement, to put in place the right incentives for consumers and increase renovation of our public infrastructure, so we have the opportunity to accelerate the transition to more efficient LED lighting.

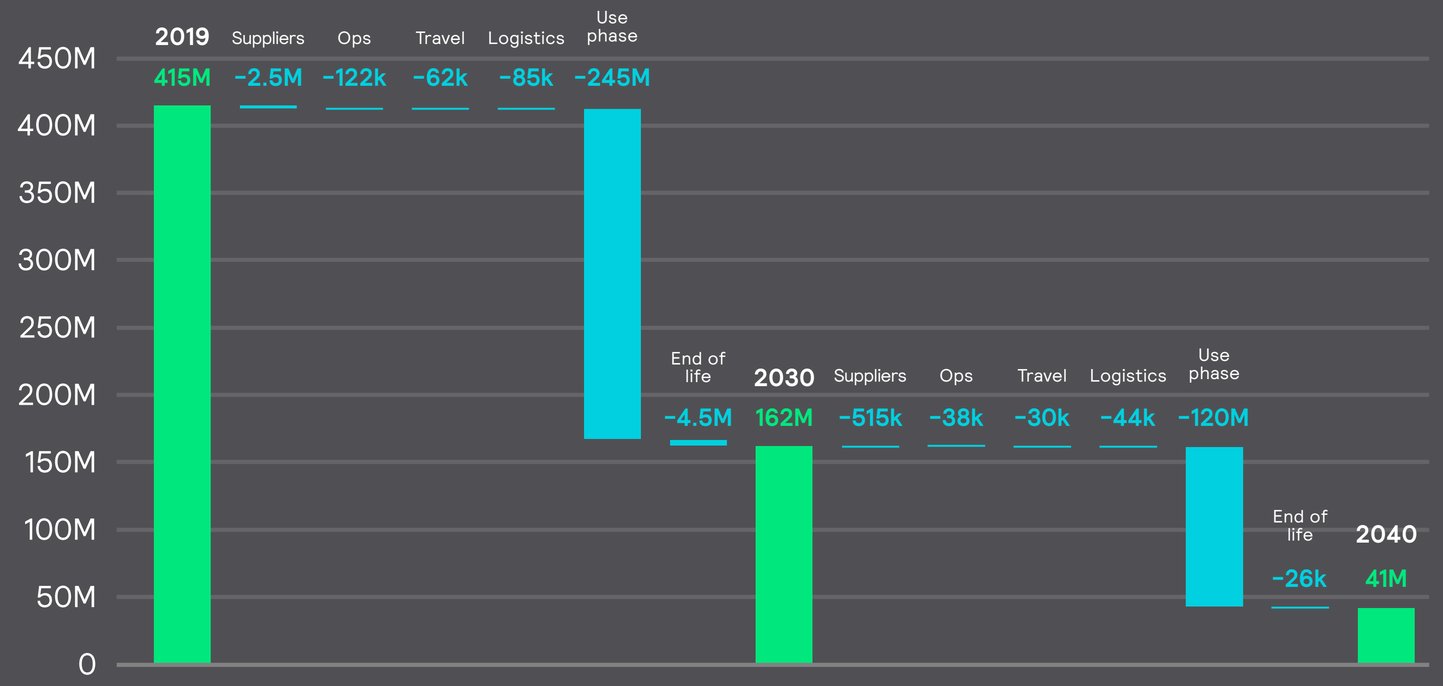
We are confident that, working together – with government and business – we can play our part in reducing the world's dependency on fossil fuels and creating a cleaner, more sustainable economy for the future.

4 Appendix

Net-zero scenario

Signify's Climate Transition Plan is based on the net-zero emissions scenario, taken from the IEA's Net-Zero Roadmap (2023 update). The chart below shows the effect of this scenario on Signify's expected scope 1, 2 and 3 carbon emissions through to 2040. The scenario considers the effects of both physical and transition risk on Signify's strategy, operations and revenue, as well as more systemic impact that may fundamentally change the company's risk and opportunities profile over time.

Scenario I: Net-zero emissions (tCO_2e)



Assumptions:

- Average increase in global temperatures of 1.5°C
- 70% renewable electricity by 2030 – 100% in developed economies by 2035, in China by 2040 and other emerging economies after 2040

Glossary and abbreviations

Phrase	Description
Ultra Efficient LED lighting	LED lamps and LED luminaires with luminous efficacy above 140 lm/W[20]
Connected LED lighting	System using Internet of Things (IoT) technology to connect LED lighting devices to a network. Lights may be remotely controlled, monitored and optimized through a management system. Connected lighting solutions are designed to provide a range of benefits, such as energy savings, improved user experience and enhanced safety and security.

Acronym	Description
CO_2e	Carbon dioxide equivalent
CSRD	Corporate Sustainability Reporting Directive
CSSO	Chief Strategy & Sustainability Officer
CS3D	Corporate Sustainability Due Diligence Directive
EHS	Environment, health and safety
EV	Electric vehicle
GDP	Gross Domestic Product
GRI	Global Reporting Initiative
IEA	International Energy Agency
IoT	Internet of Things[21]
LaaS	Light as a Service
LED	Light-emitting diode
PPA	Power Purchasing Agreement
SDG	Sustainable Development Goal
STEM	Science, technology, engineering and mathematics
TCFD	Task force on Climate-Related Financial Disclosures
TNFD	Task force on Nature-Related Financial Disclosures
UNEP	United Nations Environment Program
WMBC	We Mean Business Coalition

[20] Source: IEA

[21] The Internet of things (IoT) describes devices with sensors, processing ability, software and other technologies that connect and exchange data with other devices and systems over the Internet or other communications networks.

We welcome feedback on our Climate Transition Plan. Please send comments and suggestions to:
Signify N.V., High Tech Campus 48, 5656 AE Eindhoven, the Netherlands

E-mail: sustainability@signify.com

More information on our company, operations and approach to climate action may be found online at www.signify.com