

NESTLÉ'S 2021 CLIMATE RISK AND IMPACT REPORT



Nestlé

Good food, Good life



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INTRODUCTION

This 2021 update on Nestlé's progress has been structured in accordance with the recommendations of the Task Force on Climate-related Financial Disclosures (TCFD), including:

- Governance
- Strategy and risk management
- Assessment of resilience
- Metrics and targets
- Summary

In this report, we describe how climate change scenarios¹ may impact our business and outline our strategy to mitigate those potential impacts and ensure our resilience. Our understanding of the challenges associated with climate change is evolving and we continuously update our plans accordingly.

We recognize the deep and intricate connections between food systems and the planet's health, as well as the importance of a changing climate for our own future.

While this report focuses on Nestlé's strategy to mitigate the transition and physical risks of climate change to our business, Nestlé is also taking action to tackle climate change at source. We continuously invest in projects and programs that reduce and remove greenhouse gas (GHG) emissions, to help create a more sustainable future:

- We have embraced the most ambitious aim of the Paris Agreement, signing the 'Business Ambition for 1.5°C' pledge.
- Our Net Zero Roadmap was launched and approved by the Science Based Targets initiative in 2020 and aims to reduce our in-scope emissions by an absolute 20% by 2025 and 50% by 2030 against a 2018 baseline, regardless of growth, on our way to reach net zero by 2050.
- We are already seeing tangible impacts of this work: Nestlé reached peak carbon around 2019, and we have now delinked emissions from growth.

We recognize that climate change poses risks to current business models, but tackling it proactively can create opportunities for companies that move first in a competitive environment.



GOVERNANCE

Nestlé's oversight of climate-related risks and opportunities is embedded at the highest level of our company. We are continually evolving our corporate governance structure in recognition of the urgency of climate action and in response to our increasing understanding of the impact of climate change on our business.



OUR GOVERNANCE OF CLIMATE-RELATED RISKS AND OPPORTUNITIES

Board-level governance

Nestlé's Board maintains oversight of climate-related issues and monitors progress toward our climate change goals and targets.

Following Nestlé's Annual General Meeting in 2021, the company split its existing Nomination and Sustainability Committee into a separate Nomination Committee and a focused Sustainability Committee.

This reflects the importance of sustainability in Nestlé's corporate governance structure and allows Board members to dedicate time and focus to these topics. The Sustainability Committee provides strategic guidance on climate-related matters and reports to the full Board of Directors, which maintains overall oversight. The Sustainability Committee of the Board meets at least three times per year.

To ensure focused implementation of Nestlé's sustainability strategy, selected environmental, social and governance (ESG)-related KPIs are included in the Short-Term Bonus plan of the Executive Board.



Mark Schneider (CEO),
visiting a dairy farm in
Froideville Switzerland.

Management-level governance

Nestlé has an Executive Board-level ESG and Sustainability Council. The Council is chaired by the Group's Executive Vice President (EVP) Head of Strategic Business Units and Marketing and Sales. The ESG and Sustainability Council pulls together the geographical business scopes led by our EVP Zone CEOs and functional leadership at the Executive Board level. It meets every month and regularly reports progress to the full Executive Board.

The Council provides governance, strategic leadership and execution support, and drives implementation of Nestlé's sustainability strategy, including our 2050 Net Zero Roadmap, ensuring focus and alignment.

At an operational level, an ESG Strategy and Deployment Unit has been established. It ensures execution, monitors external developments and defines strategies in support of Nestlé's sustainability commitments. It coordinates sustainability activities and has oversight of internal sustainability data gathering and external disclosures. It also advises Nestlé's ESG and Sustainability Council.

The ESG Strategy and Deployment Unit reports to the EVP Head of Operations with strategic oversight from the EVP Head of Strategic Business Units and Marketing and Sales. Its work is complemented by other internal departments, including the Public Affairs and ESG Engagement team.



Generation Regeneration

In 2021, Nestlé launched its promise to advance regenerative food systems at scale.

Advisory

We engage regularly with a wide range of stakeholders on ESG matters. This includes consulting our Creating Shared Value (CSV) Council, an external advisory council formed in 2009. The Council provides advice to the Executive Board to ensure the sound development of Nestlé's long-term sustainability actions and the positive social and economic impact of this strategy.

We recognize that stakeholder engagement is not only important at a corporate level but can also help guide sustainability initiatives at both a local level and on specific topics. In 2021, we organized a series of virtual roundtable events to gain external perspectives from sustainability experts. We plan to run more in 2022.

ADVOCATING FOR CHANGE

We need a concerted effort by the public and private sectors together to radically decarbonize economies. This is essential for avoiding the worst potential consequences of climate change and to safeguard our collective future.

External advocacy forms a critical part of our Net Zero Roadmap, helping to create the right framework conditions for both our own and broader societal efforts to reduce emissions and mitigate risks.



Nestlé participates in a side event discussion at COP 26.

Our advocacy priorities

The right policy environment not only supports the delivery and potential acceleration of emissions reductions but also helps build broader resilience to climate-related impacts.

Reflecting our support for the most ambitious aim of the Paris Agreement, Nestlé focuses both on specific operational advocacy priorities, such as helping ensure clarity on carbon claims, as well as broader macro-level challenges like reforming agriculture policy.

All of Nestlé's advocacy activities on climate align with the ambitions of the Paris Agreement – namely the achievement of a 1.5°C-aligned decarbonization pathway.

Our advocacy priorities informed our engagement around the COP26 climate summit in Glasgow in 2021. We welcome the progress made at these negotiations on reducing potential temperature increases, particularly the recognition of the need to safeguard nature and improve livelihoods through a just transition.

However, we know that much more needs to be done in terms both of ambition and actual implementation of policy for a 1.5°C Paris Agreement-aligned pathway to remain within reach. We anticipate further momentum on climate change policy in 2022. Nestlé aims to play an active role in the build-up to and during the COP27 discussions in Egypt.

Further details can be found in our [*Creating Shared Value and Sustainability Report 2021*](#).

STRATEGY AND RISK MANAGEMENT

Climate change is a key risk for Nestlé with the potential to impact our business and our value chain. We carry out numerous climate change risk assessments, including at site, supplier and project level, as well as conducting climate change scenario analysis.

This helps us incorporate climate-related risks and opportunities into our business strategies in a resource-efficient way. As more data and insights become available, we will continue to refine our approach and assessment methodologies.



RISK MANAGEMENT – OVERVIEW

Climate risks and opportunities are included in the scope of our risk management framework, processes and reporting.

Nestlé's *Enterprise Risk Management (ERM) Framework* is designed to identify, assess and mitigate risks to minimize their potential impact and support the achievement of Nestlé's long-term business strategy. The *ERM Framework* is supported by various processes:

- A top-down assessment is performed at Group level to create a good understanding of the organization's key risks.
- A bottom-up assessment occurs in parallel, resulting in the aggregation of individual market assessments.
- A materiality assessment is carried out, where Nestlé engages with external stakeholders to better understand the issues of most concern to them. For each issue, the assessment rates the degree of stakeholder concern and potential business impact.

- A specific climate change risk assessment to support in the identification, assessment and management of climate-related risks and opportunities.

In 2021, we continued to strengthen our methodology and tools to identify, assess and manage our climate risks and opportunities. Modeling simulations evaluated the potential directional impacts on Nestlé for both transition and physical risk factors. Our assessment was led by an internal working group, representing various businesses and functions, and we partnered with Resilience² using methodology and scenarios from their academic partner, the Centre for Risk Studies at the University of Cambridge Judge Business School.

In summary, our assessment of climate risk shows the following:

- In the short to medium term, Nestlé must navigate transition risks. These risks can vary significantly depending on the nature and speed at which

jurisdictions act to align to a Paris Agreement trajectory. There may be cost increases from sourcing and operations in a world transitioning toward low-carbon models.

- In the longer term, physical risks could pose a greater threat to sourcing of raw materials.



Nestlé Purina PetCare Flagstaff factory in Arizona, United States of America

Helping expand renewable energy availability on the US grid.

OUR METHODOLOGY TO ASSESS THE IMPACTS OF CLIMATE-RELATED RISKS ON NESTLÉ

Scenario analysis allows us to better understand the impact of climate change and how it could affect our company. Scenario analysis is a critical tool for strategic and financial planning and risk management.

In 2020, we assessed our resilience over a five-year time horizon under different external conditions. In 2021, we extended the simulation from 2025 to 2030 for transition risk, and to 2040 for physical risk. The insights from this work further strengthen the importance and relevance of our climate-related actions outlined in our Net Zero Roadmap.

We assess two types of risk: transition risk and physical risk.

Transition risk

Transition risk is related to the nature, pace and timing of decarbonization of the global economy. The pathway to reduce emissions may be gradual and managed or may be rushed and abrupt.

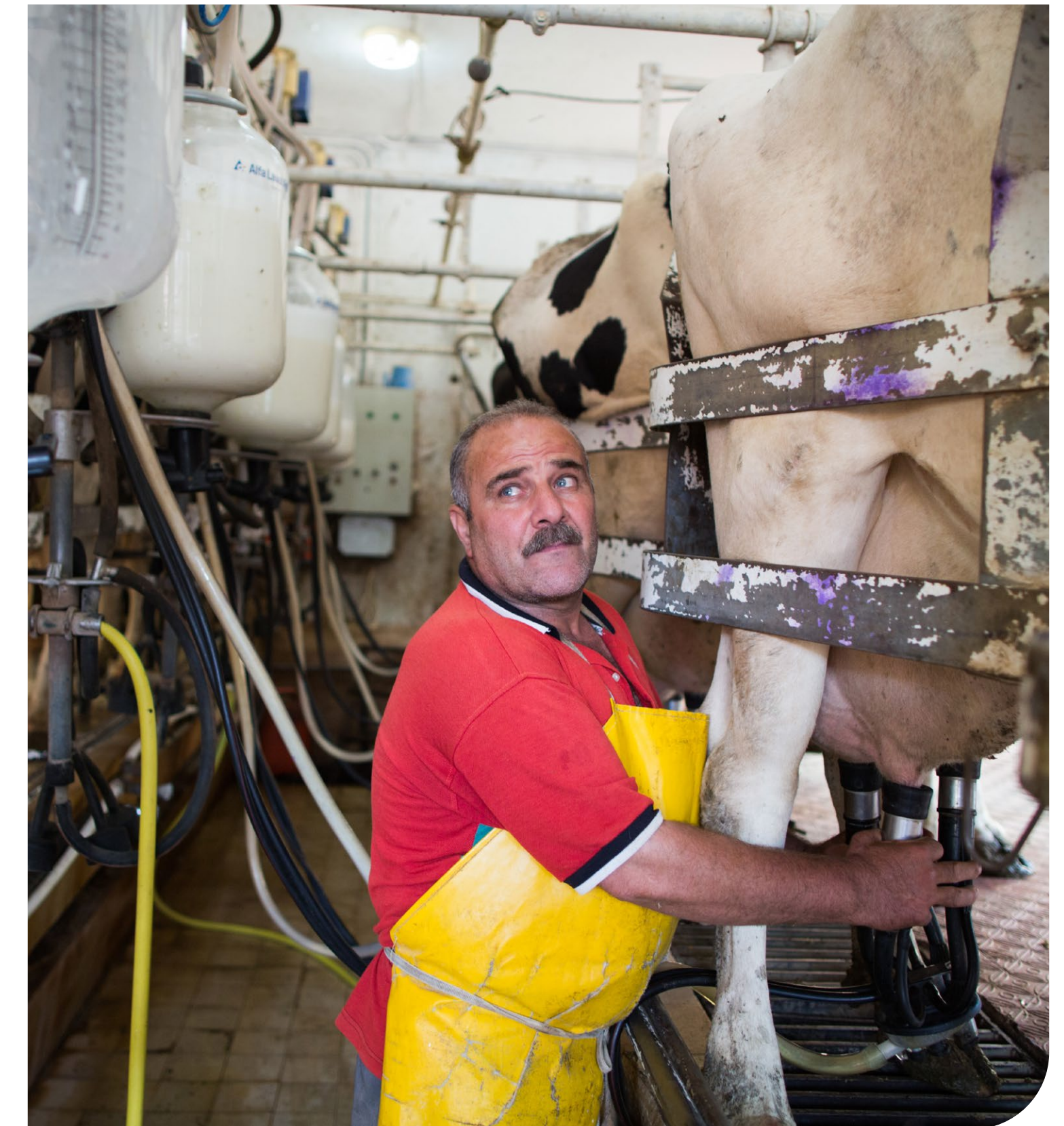
Therefore, to analyze transition risk, we used three different scenarios, based on low-, intermediate- and high-emission pathways.

Physical risk

Physical risks associated with a changing climate can be felt today. The Earth's temperature has risen since the beginning of the industrial age (by around +1.1°C) and further warming is unavoidable. Over the next few decades scientists estimate that the global temperature will most likely increase by a minimum of 1.5°C by 2040³. This is caused by the GHG emissions already in the air. To analyze the physical risk, we used this most likely scenario.

The table on the next page summarizes our 2021 assessment.

Disclaimer: Scenario modeling has several limitations. Scenarios are not forecasts; they help to evaluate a range of hypothetical outcomes, considering a variety of plausible future states under a given limited set of assumptions. Modeling the impacts of climate change is subject to uncertainty and scientific debate, both of which increase with modeling of longer time horizons. The further we look out, the more challenging it is to model external conditions. The results summarized in the following section should be reviewed in the context of these limitations.



Lebanon

Akram milks cows at Domaine de Tanail, in the Bekaa Valley.

OUR METHODOLOGY TO ASSESS THE IMPACTS OF CLIMATE-RELATED RISKS ON NESTLÉ (CONTINUED)

| Transition risk | | | | |
|------------------------------|---------------------------------------|--|---|--|
| Time horizon | | • 2030 | | |
| Scenarios⁴ | Emissions trajectory | High | Intermediate | Low |
| | Temperature rise by 2100 ⁵ | +4.0°C to +5.0°C | +2.0°C to +3.0°C | +1.5°C |
| | Global action against climate change | Few or no steps taken to limit emissions | Reliance on existing/planned policies (not commitments) | Immediate and coordinated action to curb emissions |
| Business scope | | • Upstream, direct operations and downstream | | |
| Modeling simulations | | • Net zero – Nestlé's absolute emissions decrease by 20% by 2025 and by 50% by 2030 | | |
| Modeling metric | | • Directional cumulative 10-year discounted cash flow (DCF) impacts on net zero business model under the three different scenarios | | |

| Physical risk | |
|-----------------------------|--|
| Time horizon | • 2040 |
| Warming scenario | • Projected 2040 climate assuming likely temperature rise > +1.5°C by 2040 ³ |
| Footprint scope | • Critical raw materials ⁶ – cocoa, coffee, dairy, palm oil • Direct operations (facilities) |
| Modeling simulations | • Assumed current footprint remains static until 2040 |
| Modeling metric | • Projected percentage change in crop yields in 2040 versus 2020 for selected raw materials • Projected change in annual impacts in 2040 versus 2020 due to operational disruption and asset damage to facilities |

TRANSITION RISK

In every transition scenario modeled, we see policy, technology and market changes impacting our business. The level of exposure is driven by the climate scenario, with the low-emission scenarios bringing the highest level of transition risk.

The next few years are critical for increasing our resilience to climate change. By acting now, we have time to innovate, pilot and scale up initiatives across our value chain, reducing our exposure in the second half of the decade. In particular, the simulation indicates that the lower level of emissions resulting from our Net Zero Roadmap will help reduce our transition risk.

Key examples of our mitigation strategy for various material transition risks are shown on the next page.



Nestlé Purina boosts innovative, sustainable home delivery in Chile

In Chile, Nestlé Purina started a pilot for an innovative bulk delivery system for its *Purina Dog Chow* products – in partnership with the Algramo Certified B company, a social company focusing on innovative packaging.

OUR STRATEGIC RESPONSE TO TRANSITION RISK

| Transition risk | Value chain | Impacts (assuming no mitigation) | Mitigation strategy |
|---|---|--|---|
| POLICY Action to constrain emission-intensive activities | Operations Raw materials | <ul style="list-style-type: none"> • Increase in raw materials costs • Restrictions to land use • Increase in energy costs | <ul style="list-style-type: none"> • Switch to renewable electricity (100% by 2025) • Support farmers in implementing agroforestry and increasing productivity without increasing land use through our broader regenerative agriculture program • Advance regenerative agriculture at scale (20% of our key ingredients by 2025; 50% by 2030) • Product ingredient substitution |
| | Packaging | <ul style="list-style-type: none"> • Increase in costs for packaging materials • Increase in cost of recycled packaging materials due to constraint in supplies, e.g. recycled PET | <ul style="list-style-type: none"> • Virgin plastic reduction by one-third by 2025 • Cross-industry collaboration to drive collection and recycling of packaging at scale |
| TECHNOLOGY Development of emerging technology to support a lower-carbon economy | Operations | <ul style="list-style-type: none"> • Asset write-downs, investments in low-emission technology to meet market regulation | <ul style="list-style-type: none"> • Switch to low-emission technologies |
| MARKET Shifts in supply and demand as consumers prefer sustainable alternatives | Brands and portfolio | <ul style="list-style-type: none"> • Loss of revenue and/or missed growth opportunities | <ul style="list-style-type: none"> • Constant review of products and business models based on their environmental footprint |
| | General | <ul style="list-style-type: none"> • Increase in cost of decarbonization due to high demand for carbon credits | <ul style="list-style-type: none"> • Prioritize the reduction of emissions and rapid deployment of removals projects, such as reforestation projects, in our value chain |

SCENARIO ANALYSIS – POTENTIAL TRANSITION IMPACTS

Financial impacts are cumulative up until 2030:

- Low ≤ CHF1bn
- CHF1bn < Medium ≤ CHF4bn
- CHF4bn < High ≤ CHF7bn

Estimated directional cumulative discounted cash flow impacts until 2030

| Transition risks | High emissions +4.0°C – +5.0°C | Intermediate emissions +2.0°C – +3.0°C | Low emissions +1.5°C |
|---|--|---|--|
| <p>POLICY Action to constrain emission-intensive activities</p> | <ul style="list-style-type: none"> ● Low impact • Carbon tax of USD40 per ton by 2030 with negligible financial impacts | <ul style="list-style-type: none"> ● Medium impact • Carbon tax of USD75 per ton by 2030 with moderate increase in costs of production, distribution and raw materials | <ul style="list-style-type: none"> ● High impact • Carbon tax of USD140 per ton by 2030 with significant increase in costs of production, distribution and raw materials |
| <p>TECHNOLOGY Development of emerging technology to support a lower-carbon economy</p> | <ul style="list-style-type: none"> ● Low impact • Minimal uptake of lower-carbon technology • No immediate or near-term material investments required | <ul style="list-style-type: none"> ● Low impact • Varying levels of uptake of lower-carbon technology, low investment levels required to maintain competitiveness | <ul style="list-style-type: none"> ● Medium impact • Widespread adoption of lower-carbon technology with moderate investments to meet market pressure and regulation • Input costs increase as suppliers pass on their own investment cost impacts |
| <p>MARKET Shifts in supply and demand as consumers prefer sustainable alternatives</p> | <ul style="list-style-type: none"> ● Low impact • Very low proportion of consumers adopting more sustainable choices with limited supply and demand shifts | <ul style="list-style-type: none"> ● Medium impact • Lower proportion of consumers adopting more sustainable choices with minimal supply and demand shifts | <ul style="list-style-type: none"> ● High impact • Higher proportion of consumers adopting more sustainable choices with wide-ranging supply and demand shifts |

Case study

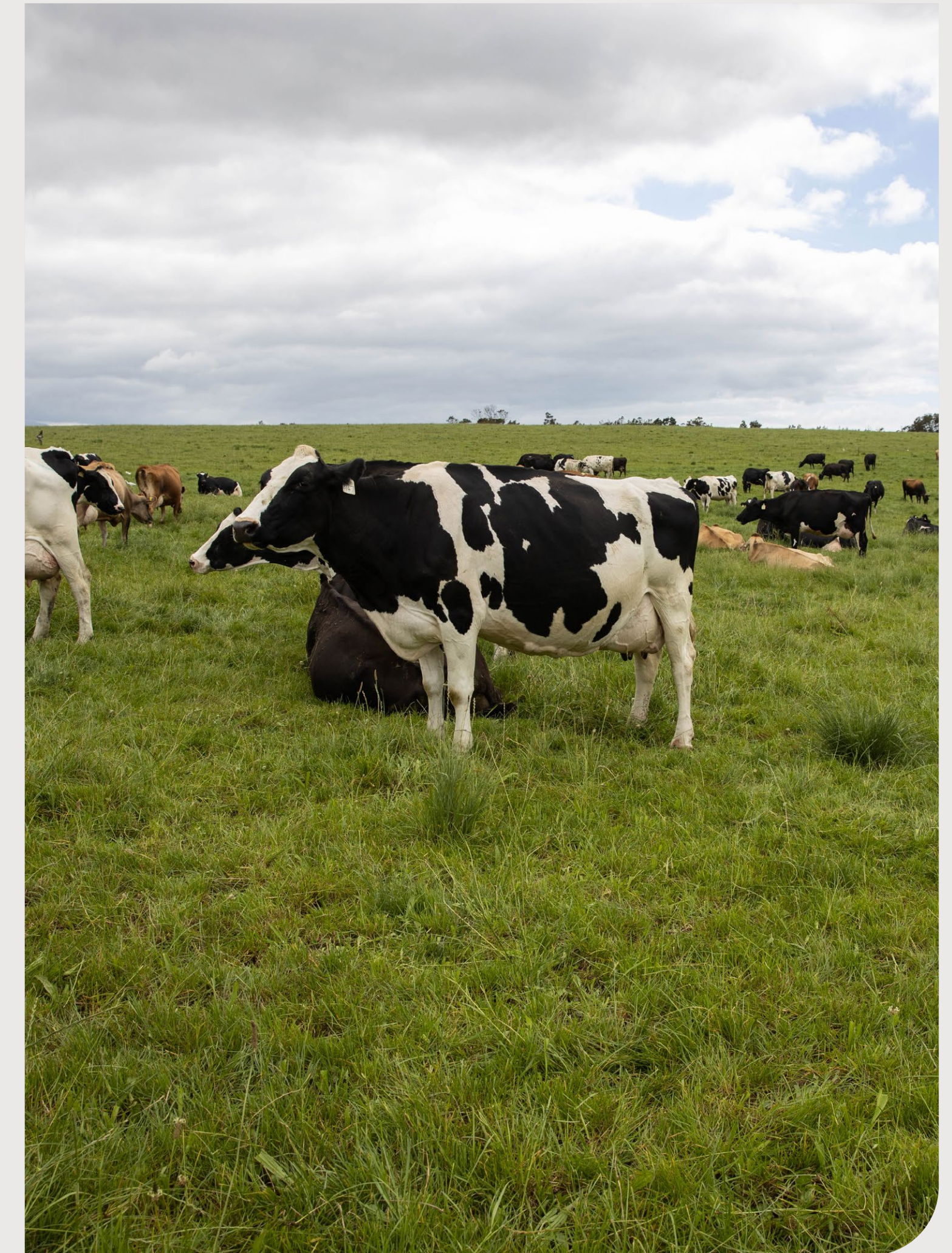
OUR RESPONSE – TACKLING EMISSIONS IN DAIRY

Nestlé has already identified and started working on specific actions that advance regenerative agriculture at scale, for example through reducing methane and other GHG emissions from dairy.

After just one year, the results of our pilot study in South Africa are extremely positive. Our lead test farm reduced its 'head count' of cows by 100 but increased its total milk yield by 12% at the same time. It reduced emissions by 40% by switching to solar electricity, and saw a 45% increase in active carbon in the soil, sequestering 4200 additional tonnes of CO₂. Further significant carbon sequestration potential remains.

There were also challenges. Low rainfall meant that in some parts of the farm, pastures had to be re-established, exposing the topsoil and affecting the potential to improve soil health. There were also practical problems associated with the smell of organic fertilizer and administrative challenges in selling electricity to the grid.

Despite this, the successful interventions tested on the pilot farm are already being replicated by other dairy farmers. This approach could contribute to a meaningful impact on reducing agricultural emissions, not only for Nestlé but also for the whole industry.



Pilot study in South Africa

PHYSICAL RISK

We assessed macro-level physical risks for our key raw materials⁷ and our facilities until 2040.

Projecting out to 2040, climate, heatwaves and drought/water stress-related risks are forecast to increase in frequency and severity.

These hazards may impact raw materials availability and quality through lower yields, yields variability and, in the longer term, a reduction in suitable areas for cultivation.

These same hazards may also disrupt our facilities and/or damage our assets.



RISK MANAGEMENT FOR KEY RAW MATERIALS – OVERVIEW

The main potential risks related to raw materials are increases in input costs and in price volatility, as well as their availability and quality. We mapped our sourcing locations and volumes and overlaid current and 2040-forecasted climate conditions to estimate the percentage change in expected yields.

Nestlé's management of the mitigation of and adaptation to physical risks from climate change is aided by the sustainable sourcing actions our company has invested in for more than 20 years. Building on this, our Net Zero Roadmap, with its commitment to advance regenerative agriculture, aims to make farmers more resilient and produce in a more sustainable manner. Initiatives range from installing biogas digesters at dairy farms to planting 20 million trees a year in sourcing locations for cocoa, coffee and palm oil. We also continue to distribute new coffee plantlets to farmers that perform better in locations affected by extreme weather events.

The technical assistance we provide to farmers is evolving with the launch and gradual implementation of regenerative agriculture practices throughout our value chains. Actions underway in countries like the US, France and Germany include the phasing down of tillage, greater use of techniques like cover and intercropping, and switching to organic fertilizers. This improves resilience to extreme weather patterns and helps our farmers reduce their dependency on inputs from outside their sphere of control. Success can rely on incentive schemes and training, but we are confident that it will pay off in the longer term by improving the supply and reliability of the commodities we purchase.

Disclaimer: Physical risks evolve over a long period of time. Beyond the next two decades, however, it becomes more challenging to make projections of how the climate may evolve. A working assumption is that chronic longer-term (and potentially irreversible) shifts in climate patterns will increase over time (including further temperature rises, sea level rise, ice cap and glacier melts).



Nestlé Institute of Agricultural Sciences

The Nestlé Institute of Agricultural Sciences will focus on plant science, dairy livestock and agricultural systems science, and has been created to translate novel agricultural science into concrete applications and to identify the most promising agricultural technologies – to implement at farm level.

RISK MANAGEMENT FOR OUR FACILITIES – OVERVIEW

We operate facilities all over the world and already face risks related to extreme weather events. The analysis provides us with further insight into the potential severity and frequency of extreme weather events and helps to strengthen our mitigation plans.

We actively manage our risks related to extreme weather through site-specific loss prevention and business continuity strategies. The impact of extreme weather events on Nestlé's facilities today is low.

The physical risks highlighted could, however, lead to a small increase in the potential level of losses over and above what is experienced today, but overall our analysis does not identify any material financial impacts until 2040.

Improving the efficiency of our water use: our 'zero water' factory in Mossel Bay, South Africa

Our Mossel Bay dairy factory, which is located in one of the Western Cape's most water stressed regions, uses new water recovery, treatment and recycling technology. This infrastructure enables the factory to reuse and recycle water from its dairy operations.



RISK MANAGEMENT FOR OUR KEY RAW MATERIALS AND FACILITIES – DETAILS

| Scope | Risk and impact up to 2040 | Mitigation strategy | | | | | | | | | |
|---|---|--|--|-------|---|----------|--|-------|---|--|--|
| <p>Raw material sourcing</p> <table border="1"> <tr> <td data-bbox="609 499 972 759">Coffee (Arabica, Robusta)</td> <td data-bbox="972 499 2079 626"> <p>Arabica: Potential reductions in yield in many sourcing regions, which may impact global production and supply</p> </td> <td data-bbox="2079 499 3175 1058" rowspan="4"> <p>Increase farmers' resilience through:</p> <ul style="list-style-type: none"> • Supporting the just transition toward regenerative agriculture practices • Deployment of incentive schemes for living incomes • Development and distribution of plantlets that are more resistant to drought and disease (for example, for coffee, leveraging Nestlé's wide agronomic network) • Agroforestry (for example, we will distribute 1.25million native forest and local fruit trees in Côte d'Ivoire and Ghana) </td> </tr> <tr> <td data-bbox="609 759 972 846">Cocoa</td> <td data-bbox="972 626 2079 759"> <p>Robusta: With a wider range of suitable growing conditions, global yields for Robusta are not expected to be significantly affected</p> </td> </tr> <tr> <td data-bbox="609 846 972 932">Palm oil</td> <td data-bbox="972 759 2079 846"> <p>Potential negative implications for global production</p> </td> </tr> <tr> <td data-bbox="609 932 972 1058">Dairy</td> <td data-bbox="972 846 2079 1058"> <p>Shift in the geographic distribution of oil palms; global yields are not expected to be significantly affected</p> </td> </tr> </table> | Coffee (Arabica, Robusta) | <p>Arabica: Potential reductions in yield in many sourcing regions, which may impact global production and supply</p> | <p>Increase farmers' resilience through:</p> <ul style="list-style-type: none"> • Supporting the just transition toward regenerative agriculture practices • Deployment of incentive schemes for living incomes • Development and distribution of plantlets that are more resistant to drought and disease (for example, for coffee, leveraging Nestlé's wide agronomic network) • Agroforestry (for example, we will distribute 1.25million native forest and local fruit trees in Côte d'Ivoire and Ghana) | Cocoa | <p>Robusta: With a wider range of suitable growing conditions, global yields for Robusta are not expected to be significantly affected</p> | Palm oil | <p>Potential negative implications for global production</p> | Dairy | <p>Shift in the geographic distribution of oil palms; global yields are not expected to be significantly affected</p> | <p>Limited impact on global productivity; shift in geographic distribution</p> | <p>Increase in water scarcity</p> <ul style="list-style-type: none"> • Water regeneration program (Nestlé Waters) • Regenerative agriculture program |
| Coffee (Arabica, Robusta) | <p>Arabica: Potential reductions in yield in many sourcing regions, which may impact global production and supply</p> | <p>Increase farmers' resilience through:</p> <ul style="list-style-type: none"> • Supporting the just transition toward regenerative agriculture practices • Deployment of incentive schemes for living incomes • Development and distribution of plantlets that are more resistant to drought and disease (for example, for coffee, leveraging Nestlé's wide agronomic network) • Agroforestry (for example, we will distribute 1.25million native forest and local fruit trees in Côte d'Ivoire and Ghana) | | | | | | | | | |
| Cocoa | <p>Robusta: With a wider range of suitable growing conditions, global yields for Robusta are not expected to be significantly affected</p> | | | | | | | | | | |
| Palm oil | <p>Potential negative implications for global production</p> | | | | | | | | | | |
| Dairy | <p>Shift in the geographic distribution of oil palms; global yields are not expected to be significantly affected</p> | | | | | | | | | | |
| <p>Water</p> | <p>Small increase in the potential level of losses attributable to climate, heatwaves and drought/water stress-related risks</p> | <ul style="list-style-type: none"> • Property loss prevention plan • Business continuity plan • Water usage reduction in factories | | | | | | | | | |
| <p>Nestlé facilities</p> | | | | | | | | | | | |

Case study

OUR RESPONSE – FOREST POSITIVE (AGROFORESTRY)

Our forest positive strategy builds on our decade-long work to end deforestation in our primary supply chains (with 97.2% deforestation-free status secured for our five forest-risk raw materials: meat, palm oil, pulp and paper, sugar and soy in January 2022).

Forest positive means moving beyond just managing deforestation risks in our supply chain to having a positive impact on our broader sourcing landscapes. This leverages our access to natural climate solutions to mitigate our emissions and helps build resilience in our supply chains.

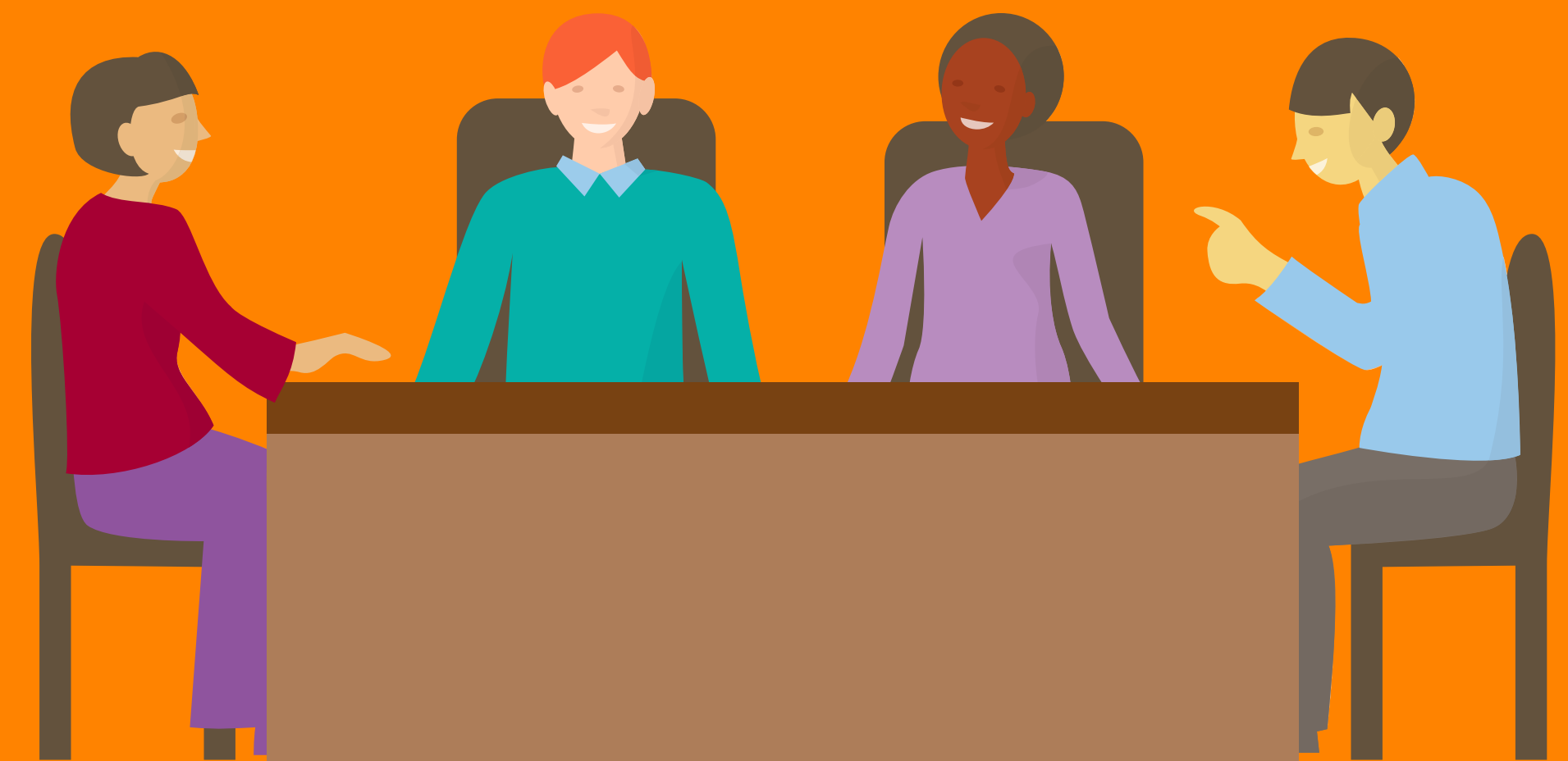
We reward suppliers for forest positive practices that keep trees standing and regenerate the land, paying premiums and investing in programs that promote forest conservation and restoration.



ASSESSMENT OF RESILIENCE

Our mitigation strategies ensure that Nestlé is well-positioned to address climate-related risks. Supported by our broad geographic scope, supply chain flexibility, research and development (R&D), diversified product portfolio, leading brands and capital strength, we have the resilience and agility to transition to a lower-carbon model and create new growth opportunities as part of our ambition to help deliver regenerative food systems at scale.

Our geographies and markets have already started to embed the mitigation strategies detailed in this report in their operational workplans. This will help shape the diversification of our sourcing locations and support our work on recipe adaptations.



The implementation of our plan is strongly influenced by external parameters, including evolving industry norms, alliances, regulations and government actions.

Looking ahead, we believe our strategic response to climate change-related risks will continue to be influenced by the following headwinds:

Demand for carbon removal projects

We predict this will accelerate, potentially faster than supply. We will maintain our dialogue with supply chain partners to identify contingency projects to act as alternatives in case of challenges securing cost-effective carbon removal agreements.

Feasibility of transforming the dairy industry

Nestlé continues to roll out pilot programs to test interventions. This will be an iterative process, with success relying on some factors outside our direct control.

Raw material cost and availability

We continue to advance regenerative agriculture practices in our value chain to ensure farmers' resilience, and adapt our product recipes to changes.

Policy uncertainty/lack of action

The pace of regulation to limit climate warming varies by country. We continue to advocate for bold climate action from policymakers.

Consumer and stakeholder understanding

We continue to engage with our consumers to advance regenerative food systems at scale through innovative products and business models.

METRICS AND TARGETS

For over a decade, we have set ESG goals for our company. We regularly measure and disclose our performance against these objectives. Further details can be found in our [*Creating Shared Value and Sustainability Report 2021*](#).



OUR KEY METRICS USED TO MEASURE AND MANAGE CLIMATE-RELATED RISKS AND OPPORTUNITIES

In addition to our existing metrics and targets, we continue to look at how best to enhance disclosures on implementing our Net Zero Roadmap.

This includes improving our ability to identify and measure emissions, working with our suppliers and customers, and exploring new ways in which we can use analytics, automation, artificial intelligence and machine learning to enhance decision making and transparency.

In line with TCFD Guidance on Metrics, Targets, and Transition Plans (October 2021), we disclose the following climate-related metrics:

| Metrics | Unit | 2020 | 2021 |
|--|-------------------|-------------|------------|
| GHG reductions achieved and removals (CO ₂ eq) secured in 2021 through Nestlé projects ⁸ | Mio t | N/A* | 13.7 |
| Deforestation-free primary supply chains for our five forest-risk raw materials: meat, palm oil, pulp and paper, sugar and soy | % | 90.0 | 97.2 |
| Renewable electricity sourced at year end (Nestlé commitment) | % | 50.50 | 63.70 |
| Total energy consumed | GJ | 81 385 568 | 82 779 476 |
| Energy consumed that is renewable energy | % | 23.10 | 25.30 |
| Energy consumed that was supplied from grid electricity | % | 12.20 | 10.20 |
| Virgin plastic reduction in 2021 versus 2018 baseline | % | 4.0 | 8.1 |
| Scope 1 emissions (CO ₂ eq) | Mio t | 3.26 | 3.37 |
| Scope 2 emissions (CO ₂ eq) (market-based) | Mio t | 1.91 | 1.61 |
| Scope 3 emissions (CO ₂ eq) | Mio t | 114.0 | 113.7 |
| Total (Scope 1+2+3) emissions (CO ₂ eq) | Mio t | 119.67 | 118.68 |
| Total water withdrawn in m ³ /y | m ³ /y | 115 400 000 | 97 998 375 |
| Total water consumed in m ³ /y | m ³ /y | 56 182 429 | 39 027 212 |
| Water withdrawn in regions with high or extremely high baseline water stress | % | 25.0 | 35.4 |
| Water consumed in regions with high or extremely high baseline water stress | % | 30.0 | 49.1 |

*New metric for 2021, not reported in prior years.

SUMMARY

Achieving net zero emissions is imperative to our continued success as a business, as is evolving our strategic response to identified climate-related risks and opportunities, putting in place the right governance, risk management and measures to ensure resilience.

Governance

- Oversight of climate-related risks and opportunities is embedded at the highest level of Nestlé's corporate structure.
- Our approach is guided and governed by our Board of Directors, including its Sustainability Committee and our ESG and sustainability council.
- A dedicated corporate ESG Strategy and Deployment Unit drives operational execution of Nestlé's sustainability strategy.

Strategy and risk management

- We continue to incorporate the risks and opportunities presented by climate change into our business strategies.
- Building on our scenario analysis, we assess and act upon transition and physical risks and opportunities for our business, including those affecting agriculture, our operations and our products.
- In the short to medium term, we must navigate climate transition risks, which can vary significantly depending on the scenarios.
- In the longer term, physical risks could pose a greater threat in terms of raw material sourcing.
- Our assessment process evolves. We continuously update our five-year operational climate workplan to integrate external developments and insights.

Assessment of resilience

- Our analysis further strengthens the importance and relevance of the climate-related actions we are implementing, and the necessity to act now to mitigate longer-term transition and physical risks.
- We are confident in Nestlé's ability to address these risks.

Metrics and targets

- In line with TCFD Guidance on Metrics, Targets, and Transition Plans (October 2021), we provide an update on our relevant climate-related metrics and our 2021 performance against them.

Coffee plantation
Agua Blanca, Brazil



Footnotes

1. The process of scenario analysis for climate change assessments is rapidly evolving and it is iterative. We expect the approaches, tools and data quality available to mature over time. Modeling the future is inherently uncertain and this increases over longer time horizons. We used hypothetical scenarios – actual events may be significantly different. The statements and results summarized in this report do not represent forecasts of expected risk and outcomes.
2. Risilience is a SaaS platform used by global companies to facilitate strategic and financial decision making from climate change. Risilience uses a rigorous scenario-based framework that integrates a wide range of threat classes with the latest international standards in climate science to provide a competitive view of a corporation's balance sheet. Risilience works closely with its academic partner, the Centre for Risk Studies at the University of Cambridge Judge Business School, to tackle complex issues of management science and business risk.
3. As reported in the IPCC report: Climate Change 2021, The Physical Science Basis, Summary for Policymakers.
4. Scenarios were based on existing published scenarios, including the Intergovernmental Panel on Climate Change (IPCC), Socioeconomic Pathways and the International Energy Agency (IEA) World Energy Outlook scenarios.
5. Temperature rises provided for each scenario are the estimated global mean surface temperatures of Earth by 2100 depending on the different emissions trajectory.
6. The raw materials selected account for a significant portion of our global raw material costs and, in some cases, were identified as being more vulnerable to the potential impacts of climate change.
7. Modeling future climatic impacts on crops is complex. This approach was a pilot scenario analysis, and we highlight the constraints of the assessment. These include the availability of accurate data, both internal data linked with the traceability of our crops, and external data projecting climatic conditions twenty years in the future. Additionally, the pilot was limited to changes in temperature and precipitation, as well as other interacting factors such as land suitability for cultivation, weather variables on plant physiology, pests and diseases etc. – which are important in estimating environmental variables on agricultural crops. Raw material production may also be impacted by transition risks. Unsustainable agricultural production is one of the biggest contributors to tropical habitat loss. This analysis did not factor in potential policy and reputational factors that may also impact on land availability for raw materials.
8. Nestlé reached peak carbon around 2019.

Disclaimer

This report is focused on climate-related risks and opportunities following the recommendations of the TCFD. Further information on other environmental, social and governance topics can be found in Nestlé's *Creating Shared Value and Sustainability Report 2021*.

This report contains forward-looking statements based upon current expectations and assumptions regarding anticipated developments and other factors. They are not historical facts, nor are they guarantees of future performance since they are subject to numerous assumptions, risks and uncertainties, which change over time. Forward-looking statements speak only as of the date they are made, and various factors could cause actual performance to differ materially from that expressed or implied by these forward-looking statements. Nestlé assumes no duty to, and does not undertake to, update forward-looking statements. Nestlé aims to evolve its disclosures in the future to provide meaningful information to stakeholders by adapting it to new facts and regulation impacting the changing climate landscape.

We welcome and encourage our stakeholders to provide any feedback you may have on this report by contacting us via ir@nestle.com





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