PHILIPS

Publication of the

Task Force on Climate-Related Financial Disclosures (TCFD) 2022

Executive summary

Philips recognizes the importance of identifying, assessing and mitigating climate-related risks to ensure business continuity and resilience. We provide the annual Task Force on Climate-related Financial Disclosures (TCFD) recommendations to provide the information needed by investors, lenders, insurance underwriters and other stakeholders to appropriately assess and price climate-related risks and opportunities.

To identify Philips' climate-related risks and opportunities, together with KPMG, we work with an internal multi-disciplinary team from Business Continuity Management, Enterprise Risk Management, Real Estate, Innovation & Strategy and Sustainability. Since the release of our first TCFD report in 2020, we have elaborated on Philips' climate physical and transition risk management processes inspired by the TCFD framework, in which 15 climate-related vulnerabilities were identified: four physical, four regulatory, one technological, two market, one reputational and three social vulnerabilities that each could lead to positive or negative impacts.

In this year's report, we provide a comprehensive overview of the climate-related risks and opportunities landscape and how these can be assessed in the context of three Shared Socioeconomic Pathways (SSPs) and four Representative Concentration Pathways (RCPs) by 2030 and 2050. Combining the different narratives has improved our understanding of Philips' risks and opportunities, allowing us to make more granular assumptions when making climate risk assessments.

The following summary may not, however, include all risks and opportunities that may ultimately impact Philips. This list is not exhaustive, but a selection based on desk research, expert views, and interviews. Some risks not yet known to Philips, or currently believed not to be material, could ultimately have a major impact on Philips' businesses, objectives, revenues, income, assets, liquidity, or capital resources.

Governance

Disclose the organization's governance around climate-related risks and opportunities

Recommended Disclosure a)

Describe the Board's oversight of climate-related risks and opportunities.

Climate-related risks and opportunities are a responsibility of the Executive Committee. The Risk Management Support Team, consisting of experts on various categories of enterprise risk, supports the Executive Committee through regular analysis of the enterprise risk profile and enhancement of the risk management framework. Climate-related risks and opportunities are managed the same way as other risks described in Section 6 "Risk Management" of the Annual Report 2022.

Recommended Disclosure b)

Describe management's role in assessing and managing climate-related risks and opportunities.

Risks are assessed at least annually. For more information on the Executive Committee's oversight of risk, please refer to Section 6.1 "Our approach to risk management" (Risk management governance), 6.2 "Risk factors", 6.3 "Strategic risks", 6.4 "Operational risks", 6.5 "Financial risks", and 6.6 "Compliance risks" of the Annual Report 2022.

The Executive Committee's approach toward assessing and managing climate-related risks and opportunities is driven by the Environmental, Social & Governance (ESG) commitments, which include the ambition to reduce CO_2 emissions in our entire value chain in line with a 1.5 °C global warming scenario (based on Science Based Targets). Please refer to section 5.2 "Philips' ESG commitments" for more details.

The ESG Committee is the highest governing ESG body and is co-chaired by the Chief Executive Officer and the Chief ESG and Legal Officer, who are both members of the Board of Management. Five other Executive Committee members, our Chief Operating Officer, our Chief Strategy & Innovation Officer, our Chief Human Resources Officer, our Chief Business Leader Precision Diagnosis and our Chief International Markets Market Leader, sit on the ESG Committee together with functional executives. The ESG Committee normally convenes four times per year, defines Philips' ESG strategy, commitments, programs and policies, monitors progress and takes corrective action where needed. For more information, please refer to Section 13.1.9 "ESG governance" of the Annual Report 2022.

At Philips, Environmental, Social & Governance are the three key dimensions within which a company's approach to doing business responsibly and sustainably, and its overall societal impact, are defined. They give expression to an increasingly widely held view – that companies that hold themselves accountable to their stakeholders and increase transparency will be more viable, and valuable, in the long term. We strongly believe that our ESG framework comprises a detailed plan of action that guides the execution of the company's strategy to face climate-related challenges.

Strategy

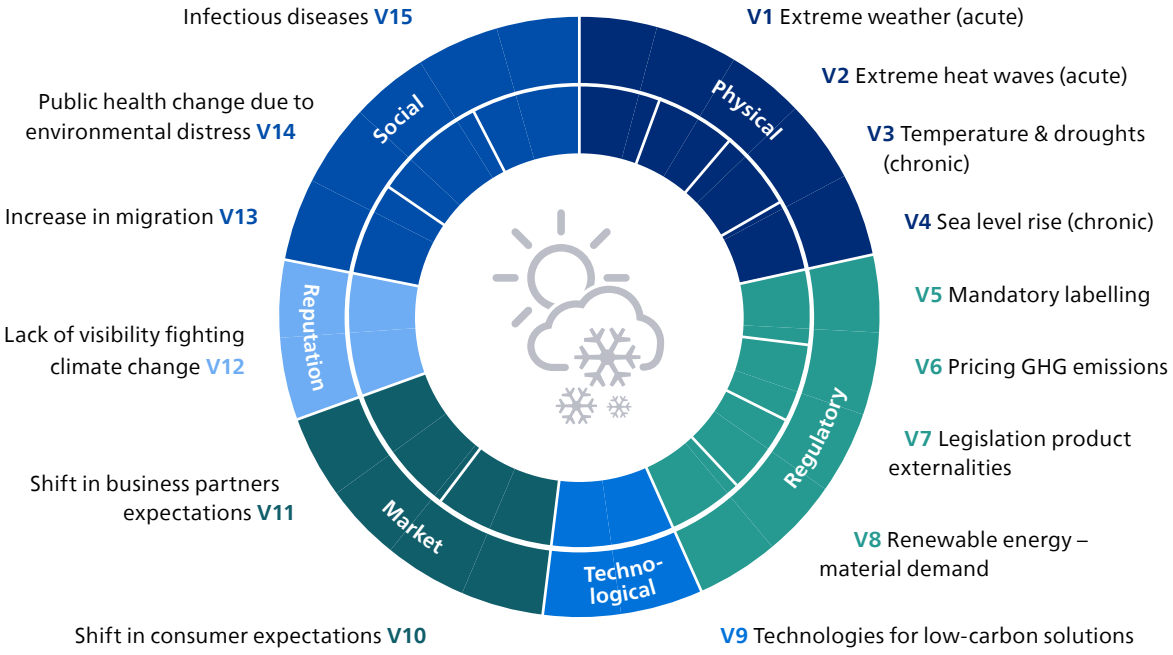
Disclosures on the actual and potential impacts of climate-related risks and opportunities on the organization's businesses, strategy, and financial planning where such information is material. the organization's governance around climate-related risks and opportunities

Recommended Disclosure a)

Describe the climate-related risks and opportunities the organization has identified over the short, medium, and long term.

Philips has assessed climate change as a major threat to society and human health. According to research from the Potsdam Institute for Climate Impact research, over 4% of global CO_2 emissions are caused by the Healthcare sector, thereby making climate change also very relevant for our customers – posing both a risk and an opportunity to our business.

Climate-related vulnerabilities



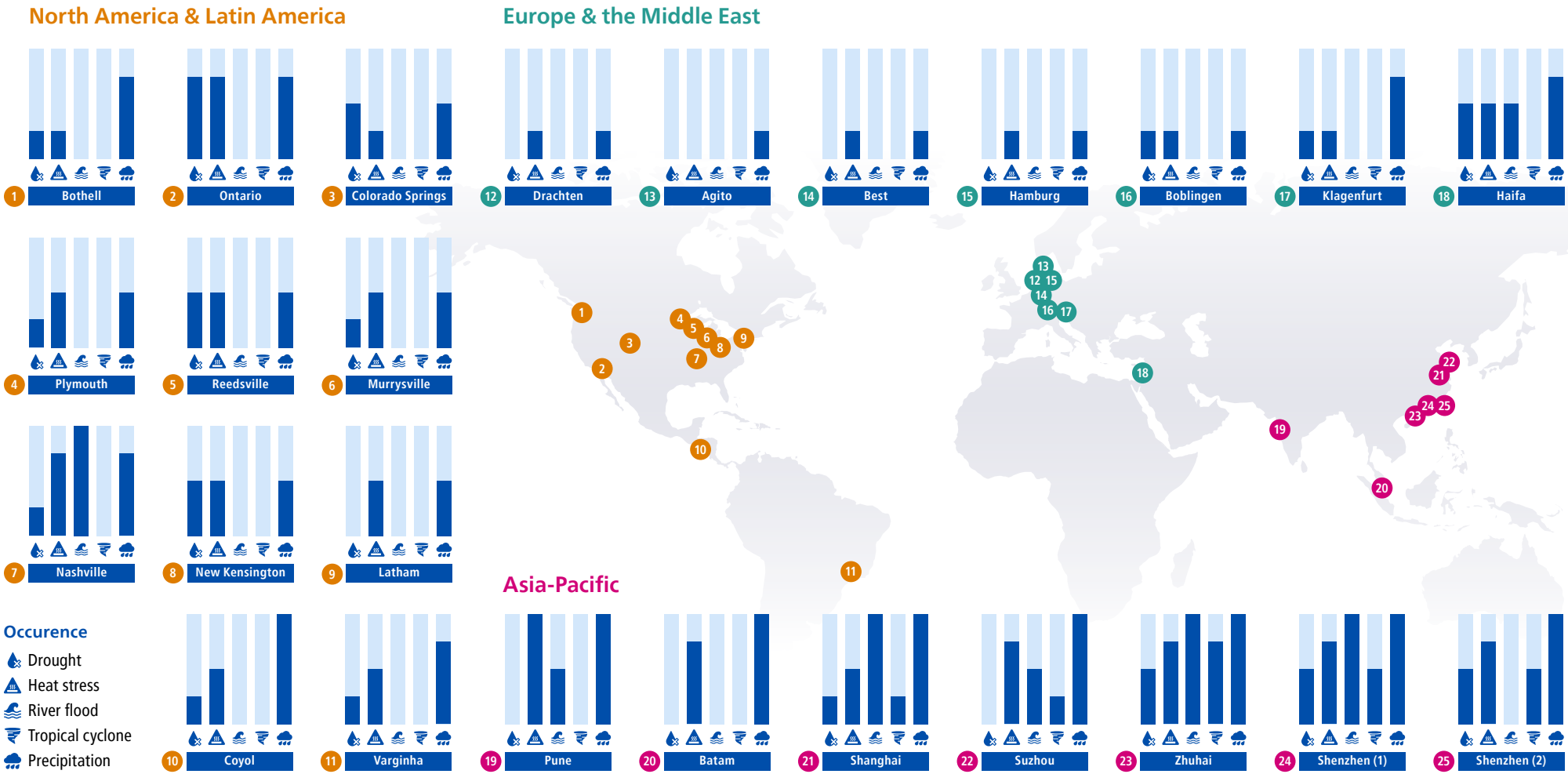
This report identifies two main risk categories: physical risks corresponding to acute or chronic physical impacts caused by climate change and transition risks associated with the movement towards a low-carbon future. In accordance with previous TCFD disclosures 15 vulnerabilities were identified and correspondingly used as starting point for the identification of company or site-specific risks.

For the physical risk factors a site-specific analysis was conducted that leveraged both the external Munich RE NATHAN insurance tool and internal site experts. While Munich RE NATHAN uses scientific models to determine how exposed different regions are to climate risk factors, the site-specific experts have access to specialized knowledge on the climate change preparedness of the sites. Combining both internal and external expertise ensures we have a differentiated view that considers both regional implications and Philips specific implications.

Regarding the analysis of the physical risk factors the input of RE NATHAN was leveraged to determine which risks are most prominent and threatening in the medium- and long-term. Insights are therefore confined to the year 2030 and 2050, ensuring proximity to the potential impacts which in turn stresses the need for immediate action. Using a longer-term approach that goes beyond this horizon would have enticed passivity as impacts are distant and obscure.

In total four acute physical risks and one chronic risk were considered: heat stress, droughts, precipitation, river floods and tropical cyclones. Heat stress being a chronic threat while all others are acute risks.
For each hazard different global warming scenarios were applied, ranging from 1.5ºC up to 5ºC, which corresponds to greenhouse gas (GHG) concentration pathways of RCP1.9, RCP2.6, RCP4.5 and RCP8.5. This assessment was confined to all manufacturing sites and the most important non-industrial sites. As a result, 25 sites scattered across the globe were included. Sea level rise was not included due to the Munich RE NATHAN data only examining the 2100 horizon for this factor which was out of scope of our analysis. See map on following page for reference.

Likelihood of occurrence of acute and chronic physical stress



Transition risks

Transition risks are dependent on a number of variables that are less scientifically supported meaning their influence and impact are more difficult to predict. These risks were collected and evaluated by internal subject matter experts in line with Philips central risk management standard (Section 6. Risk Management of the Annual Report 2022). In total 13 material transition risks were identified, each attributed to one of the 15 vulnerabilities. More precisely; 3 social, 1 reputational, 2 market, 2 technological and 5 regulatory risks have been scrutinized. To increase comparability each transition risk was evaluated in light of the SSP framework.

Risk cluster	Risk name	Where does risk reside?	Vulnerability	ID	Reference
Regulatory	Mandatory energy labeling for Philips products	Operations	Mandatory labelling	V05	The regulatory risks reside on a compliance level and are closely linked to section 6.6 "Compliance risks" of the Annual Report 2022. Safety and Environmental requirements are observably increasing in a variety of new and upcoming legislation. Mandatory energy labels could force Philips high energy consuming markets from the market.
Regulatory	Mandatory LCA certificates	Operations	Mandatory labelling	V05	The regulatory risks reside on a compliance level and are closely linked to section 6.6 "Compliance risks" of the Annual Report 2022. Safety and Environmental requirements are observably increasing in a variety of new and upcoming legislation. Mandatory LCA certificates would require supply chain transparency increasing time to market for new products.
Regulatory	100 EUR/tonnes CO_2e	Operations	Pricing GHG emissions	V06	The taxation of GHG emissions is closely connected to Philips operations and linked to section 6.4 "Operational risks" of the Annual Report 2022. This would erode profit margins and emphasize a transition to renewable energy sources.
Regulatory	Defining maximum lifetime energy consumption	Operations	Legislation product externalities	V07	The regulatory risks reside on a compliance level and are closely linked to section 6.6 "Compliance risks" of the Annual Report 2022. Safety and Environmental requirements are observably increasing in a variety of new and upcoming legislation. Laws on the maximum lifetime energy consumption of products could inhibit Philips from selling certain products.
Regulatory	Shortage of key components	Supply Chain	Renewable energy and material demand	V08	Material shortages are linked to the resiliience of our supply chain and explored in the Annual Report 2022 under section 6.4 "Operational risks". If Philips is not able to respond swiftly to those factors, this may result in an inability to deliver on customer needs, ultimately resulting in loss of revenue and margin.
Technological	Betting on the wrong horse increasing the amount of locked in GHG emissions	Operations	Technologies for low carbon solutions	V09	Philips could potentially also invest in the wrong technologies resolving in sub-optimal performance. As consequence Philips may ultimately lose market share and lock-in future GHG emissions. This is related to section 6.4 "Operational risks" of the Annual Report 2022.
Technological	Lack of investment in green innovations	Operations	Technologies for low carbon solutions	V09	On an operational level internal inertia could limit Philips innovation capacity. This is related to section 6.4 "Operational risks" of the Annual Report 2022.
Market	Inability to meet customer ESG-related expectations	Customer	Shift in consumer expectations	V10	On a strategic side there is a shift from consumers that expect Philips to support them in their ambition to reduce their environmental footprint. Any inability by Philips to address concerns about ESG-related matters could negatively impact sentiment towards Philips. More information can be found in the Annual Report 2022 under section 6.3 "Strategic risks".
Market	Inability to meet business partner expectations	Customer	Shift in business partners expectations	V11	On a strategic side there is a shift from business partners that expect Philips to support them in their ambition to reduce their environmental footprint. Any inability by Philips to address concerns about ESG-related matters could negatively impact sentiment towards Philips. More information can be found in the Annual Report 2022 under section 6.3.
Reputation	Threat of litigations	Customer	Lack of visibility fighting climate change	V12	Not being able to easily communicate sustainable actions and targets externally could significantly harm Philips reputation and brand value. For a more detailed elaboration please check out the Annual Report 2022 section 6.4 "Operational risks".
Social	Workforce drainage	Operations	Increase in migration	V13	Philips transition journey is impacted by social phenomena's such as increased migration. Workforce drainage could hamper productivity and interrupt freight transport due to our dependency on specialized skills. For more information check the Annual Report 2022 section 6.4 "Operational risks".
Social	Apocalypse fatigue lowering employee productivity	Operations	Public health change due to environmental distress	V14	Philips transition journey is impacted by social phenomena's such as increased environmental distress. Sites are fully are faced with employees that are increasingly exposed to mental health issues due to climate change and its side effects. For more information check the Annual Report 2022 section 6.4 "Operational risks".
Social	Pandemic disrupting production	Operations	Infectious diseases	V15	Philips transition journey is impacted by social phenomena's such as the spread of infectious diseases. With increased globalization and biodiversity destruction the probability of pandemics impacting Philips operations is soaring. For more information check the Annual Report 2022 section 6.4 "Operational risks".

Opportunities

Climate-related opportunities relate to efforts to mitigate and adapt to climate change. As sustainability is strongly embedded in Philips' core business processes, we have identified several opportunities associated to our longstanding commitment to doing business responsibly and sustainably.

Risk Cluster	Opportunity name	Where does this opportunity reside?	Vulnerability	ID	Reference
Regulatory	100 EUR/tonnes CO_2e	Supply Chain	Pricing GHG emissions	V06	At Philips, we see climate change as a serious threat. Therefore, we are taking action to rethink our business models and decouple economic growth from the impact we have on the environment. For more information, refer to section 5.3.3 "Sustainable Operations" of the Annual Report 2022.
Regulatory	Biodiversity and Ecosystem Services	Operations	Legislation product externalities	V07	Philips recognizes the importance of a thriving biodiversity and healthy ecosystems for our company, our employees, and society as a whole. For more information, refer to section 13.3.2 "Biodiversity and Ecosystem Services" of the Annual Report 2022.
Regulatory	Circular Economy initiatives	Supply Chain	Renewable energy and material demand	V08	At Philips, we see huge opportunities for businesses to provide greater value to customers and our planet through innovative service models, smart upgrade paths, product take-back, refurbishing and remanufacturing programs, and software driving resource optimization. For more information, refer to section 13.3.1 "Circular Economy" of the Annual Report 2022.
Technological	Green/EcoDesigned Innovation	Operations	Technologies for low carbon solutions	V09	The Research and Development spend related to the development of new generation of green/ EcoDesign products addresses the emissions caused by the Healthcare industry. For more information, refer to section 5.3.1 "Green/EcoDesigned Innovation" of the Annual Report 2022
Market	Change in customer requirements	Customer	Shift in consumer expectations	V10	We see a growing demand from our customers, including hospitals, to reduce their environmental impact. Through our EcoDesign process we aim to create products and solutions that have significantly less impact on the environment during their whole lifecycle. For more information, refer to section 5.3.2 "Green/EcoDesigned Revenues" of the Annual Report 2022.
Market	Sustainable Operations	Supply Chain	Shift in business partners expectations	V11	We have raised the bar and set ambitious emission reduction targets to ensure we help limit the impact of global warming, not only in our operations, but throughout our value chain. For more information, refer to section 5.3.3 "Sustainable Operations" of the Annual Report 2022.
Market	Advocate Philips' policy position to policy makers in the development of environmental regulations	Supply Chain	Shift in business partners expectations	V11	In 2020, Philips further reinforced its commitments as a purpose-driven company with the announcement of an enhanced and fully integrated approach to doing business responsibly and sustainably. For more information, refer to section 5. "Environmental, Social and Governance" of the Annual Report 2022.
Social	Higher demand for acute and chronic healthcare across the heathy continuum	Operations	Public health change due to environmental distress	V14	Besides the healthcare sector's natural drivers of growth, we expect a higher demand for acute and chronic diseases. This would fuel growth for Philips. For more information, refer to section 3.1 "Driven by purpose" of the Annual Report 2022.

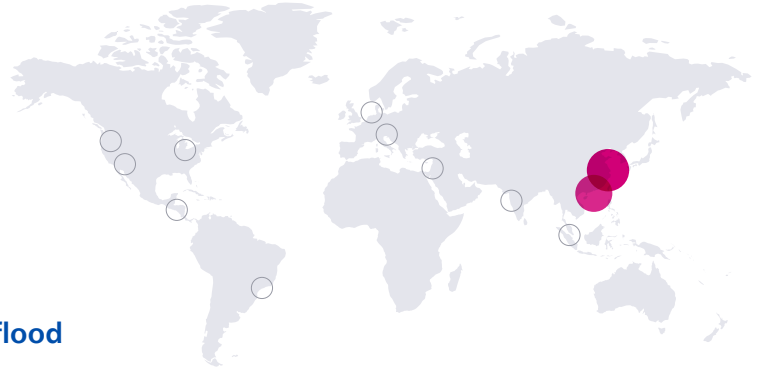
Recommended Disclosure b) and Recommended Disclosure c)

Describe the impact of climate-related risks and opportunities on the organization's businesses, strategy, and financial planning and describe the resilience of the organization's strategy, taking into consideration different climate-related scenarios, including a 2°C or lower scenario.

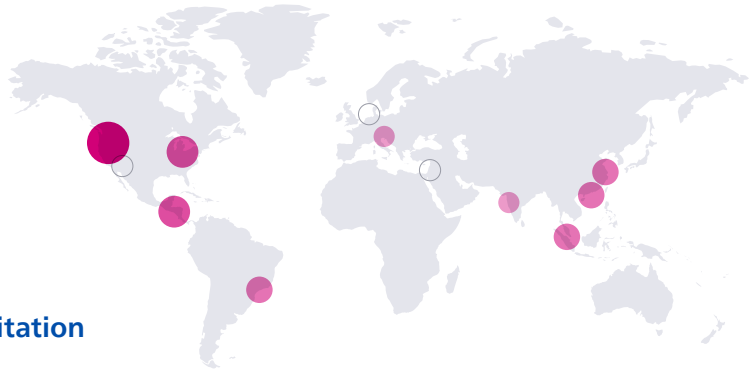
To assess the potential impact and resilience of physical climate-related risk factors, leveraged by both the external Munich RE NATHAN insurance tool and internal site experts each site was individually scrutinized. This was done through an assessment that considered physical attributes of the site, governmental measures, infrastructure attributes and historic recollections in line with RCP1.9, RCP 2.6, RCP4.5, and RCP 8.5. The main insight being that high exposure to a physical risk factor does not directly translate into large impact. Especially those sites that are already exposed to high levels of a certain risk are generally very good in managing this risk. They have gained vast amounts of experiences in controlling the risk and both the local government and infrastructure is structured in such a way to be able to respond effectively to the corresponding risk. In contrast a high rate of change is more problematic for our sites due to the impact this has on the local ecosystems. Key thresholds are exceeded leading to social and ecological turmoil. Mapping these rates of change is therefore crucial for Philips to implement responsible mitigation and adaption strategies.

Impact of occurrence of acute and chronic physical stress

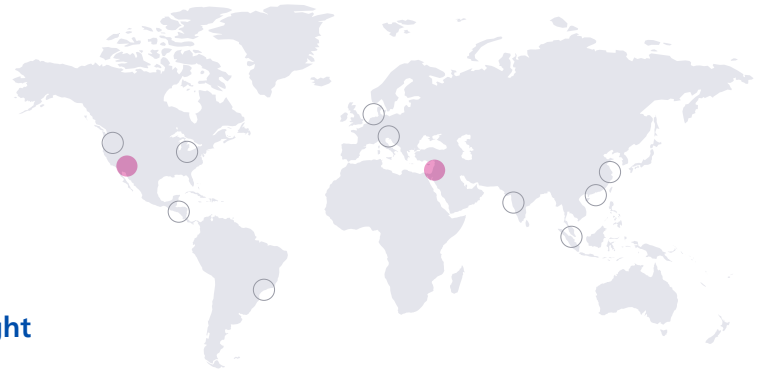
Heat stress and precipitation are the two most common physical risk factors that will likely be material for most of the impacted sites in the future. 13 sites were asked to further scrutinize the impact of precipitation and 12 sites were asked to assess the influence of heat stress. In contrast the third most material risk factor, river flood, was only assessed by 6 sites. The impact however, from both heat stress and precipitation generally, remains low. Even though several sites highlighted that employees might face struggles in their private life this does not translate into negative impacts for Philips' operations. With regards to heavy rain events several Philips sites can benefit from their unique location at elevated points compared to their surroundings. This ensures the risk of flash floods following a heavy rain event is limited. Regional impact evaluations can be explored here.



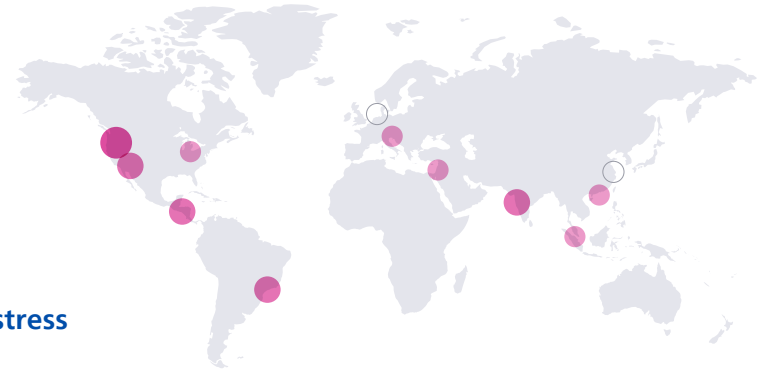
River flood



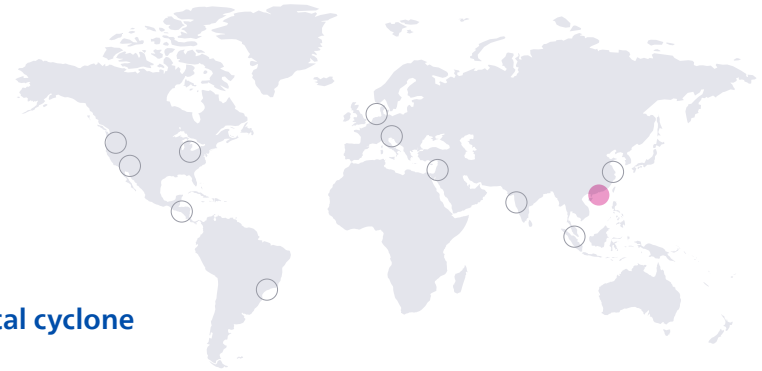
Precipitation



Drought



Heat stress



Tropical cyclone

Impact of occurrence of transition risks and climate-related opportunities

To analyze the impact and resilience of climate-related transition risks and opportunities, we have applied 3 different macro-level scenarios in line with the Shared Socioeconomic (SSP) models of the International Institute for Applied Systems Analysis (IIASA). In each a different narrative is applied which influences how the society, economy and natural environment will evolve in the future. This is done in alignment with the RCP scenarios of 1.9, 2.6, 4.5 and 8.5. SSP1 is related to RCP 1.9 & 2.6, however with slightly different adoption rates.

SSP1 – RCP 1.9 is the most optimistic model assuming immediate action and cross sector cooperation. SSP1 – RCP 2.6 on the other hand introduces a transition period leading to a slightly longer dependency on fossil fuels. Both models correspond to the green road. SSP2 – RCP 4.5 reflects a continuation of the current trajectory with large regional disparities. This refers to the middle road. SSP5 – RCP8.5 applies a technocentric approach focused on climate adaption rather than mitigation. This model refers to the highway.

Taking the green road

The green road assumes a proactive approach is taken. Common resources are managed through tri-partite collaboration allowing nature to recover and thrive. This favorable outlook assumes society faces low challenges for climate mitigation and climate adaption.

Economy

International Markets remain highly connected with regional differentiation. Inequalities across and within countries are reduced.

Regulations

Effective international cooperation with stringent environmental laws. Regional policies and subsidies emphasize sustainable development.

Lifestyle

Global living standards are improved (especially in low-income countries). Consumption follows the principles of reduce, reuse and recycle. Meat consumption is significantly diminished.

Demographics

There is a slow and steady population growth with low migration and mortality rates. Speed of urbanization increases in a well managed order considering cross sector collaboration.

Technology

Research focused on low carbon and energy efficient innovations. Swift transfer of knowledge across borders and disciplines allowing for rapid and homogenous global development.

Projections for 2050

Global GDP compared to world without climate change

4% - 11% (1)

Global warming compared to pre-industrial levels

1.5°C - 2°C (2)

Expected sea level rise

0.2 meters (3)

Global population at very high risk of heat

0.3 billion (4)

Access to health facilities

High (5)

1. Reinsurance, M. O. C. E. O. (2023, January 27). The Economics of Climate Change. Swiss Re. Source
2. The World Bank Group. (n.d.). World Bank Climate Change Knowledge Portal. Home. Source
3. Intergovernmental Panel on Climate Change . (n.d.). IPCC AR6-WGI Atlas. IPCC WGI Interactive Atlas. Source
4. Dong, W., Liu, Z., Liao, H., Tang, Q., & Li, X. (2015). New climate and socio-economic scenarios for assessing global human health challenges due to heat risk. Climatic Change, 130(4), 505–518. Source
5. O'Neill, B. C., Kriegler, E., Ebi, K. L., Kemp-Benedict, E., Riahi, K., Rothman, D. S., van Ruijven, B. J., van Vuuren, D. P., Birkmann, J., Kok, K., Levy, M., & Solecki, W. (2017). The roads ahead: Narratives for shared socioeconomic pathways describing World futures in the 21st Century. Global Environmental Change, 42, 169–180. Source

Middle of the road

The middle of the road assumes a similar trajectory to the current global trend. Combatting climate change remains mainly about reducing negative externalities and global markets continue to function imperfectly. Society therefore faces a moderate challenge of mitigating and adapting.

Economy

International Markets remain semi-connected. Inequalities across and within countries are addressed, however not very effectively. This reduces social cohesion and leads to citizens resigning from participation.

Regulations

Low international cooperation. Local communities left alone in their battle against pollution. Uneven regulatory approaches to tackling climate change.

Lifestyle

Living standards are improved however with regional differences. Consumption remains heavily dependent on material extraction. Meat consumption is reduced by some but not significantly.

Demographics

There is a medium population growth with medium migration and mortality rates. Speed of urbanization remains constant with high degrees of path dependency.

Technology

Some research investments made into low carbon innovations. Strong reliance, however on fossil fuels. Slow and rigid knowledge transfer due to the fear of being outcompeted. High reluctancy to use unconventional resources.

Projections for 2050

Global GDP compared to world without climate change

14% (1)

Global warming compared to pre-industrial levels

2.6°C (2)

Expected sea level rise

0.2 meters (3)

Global population at very high risk of heat

3.4 billion (4)

Access to health facilities

Medium (5)

1. Reinsurance, M. O. C. E. O. (2023, January 27). The Economics of Climate Change. Swiss Re. Source
2. The World Bank Group. (n.d.). World Bank Climate Change Knowledge Portal. Home. Source
3. Intergovernmental Panel on Climate Change . (n.d.). IPCC AR6-WGI Atlas. IPCC WGI Interactive Atlas. Source
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Taking the highway

The highway assumes that competition will contribute to social development. Global institutional barriers are removed eliminating market impurities. Global environmental impacts are disregarded causing a high mitigation challenge for society. In contrast a low adaption challenge is assumed.

Economy

Highly globalized environment with reduced inequalities across countries. Regional specializations to serve the global market.

Demographics

Low population growth due to a focus on personal development. High levels of urbanization leading to some issues considering its unregulated nature.

Regulations

Effective cooperation with regards to the societal development. Not effective in achieving environmental goals. Environmental regulations are only implemented on a regional level.

Technology

Technological development is fueled by the exploitation of fossil fuels and energy intensive processes. Rapid exchange of ideas also facilitates global development.

Lifestyle

High mean wages promote materialism and meat rich diets. Low barriers for mobility furthermore fuel tourism and cultural exchange.

Projections for 2050

Global GDP compared to world without climate change

18% (1)

Global warming compared to pre-industrial levels

3.2°C (2)

Expected sea level rise

0.3 meters (3)

Global population at very high risk of heat

10 billion (4)

Access to health facilities

High (5)

1. Reinsurance, M. O. C. E. O. (2023, January 27). The Economics of Climate Change. Swiss Re. Source
2. The World Bank Group. (n.d.). World Bank Climate Change Knowledge Portal. Home. Source
3. Intergovernmental Panel on Climate Change . (n.d.). IPCC AR6-WGI Atlas. IPCC WGI Interactive Atlas. Source
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Transition risks

The resilience of Philips and its adaptive capacity in response to transition risks, depending on each SSP scenario, is reflected in the following table.

Risk cluster	Risk name	Where does risk reside?	Vulnerability	ID	Taking the green road (RCP1.9 & RCP 2.6)	Taking the middle road (RCP 4.5)	Taking the highway (RCP 8.5)
Regulatory	Mandatory energy labeling for Philips products	Operations	Mandatory labelling	V05			
Regulatory	Mandatory LCA certificates	Operations	Mandatory labelling	V05			
Regulatory	100 EUR/tonnes CO_2e	Operations	Pricing GHG emissions	V06			
Regulatory	Defining maximum lifetime energy consumption	Operations	Legislation product externalities	V07			
Regulatory	Shortage of key components	Supply Chain	Renewable energy and material demand	V08			
Technological	Betting on the wrong horse increasing the amount of locked in GHG emissions	Operations	Technologies for low carbon solutions	V09			
Technological	Lack of investment in green innovations	Operations	Technologies for low carbon solutions	V09			
Market	Inability to meet customer ESG-related expectations	Customer	Shift in consumer expectations	V10			
Market	Inability to meet business partner expectations	Customer	Shift in business partners expectations	V11			
Reputation	Threat of litigations	Customer	Lack of visibility fighting climate change	V12			
Social	Workforce drainage	Operations	Increase in migration	V13			
Social	Apocalypse fatigue lowering employee productivity	Operations	Public health change due to environmental distress	V14			
Social	Pandemic disrupting production	Operations	Infectious diseases	V15			

Regulatory Risks

Philips is committed to reduce its environmental footprint and delivering the highest-quality products, services, and solutions compliant with all applicable laws and standards. Our Quality & Regulatory function closely monitors developments in the regulatory landscape. Philips also manages carbon pricing risk by reducing its full value-chain carbon footprint, as well as partnering with suppliers to reduce their environmental footprint and closely monitoring carbon regulations, including carbon taxes. Moreover, an internal carbon price has been applied for numerous years ensuring high levels of preparedness in case regulatory bodies implementing stringent and comprehensive pricing schemes.

Technological Risks

Philips has transformed to accelerate the understanding of rapidly evolving customer needs and to translate that understanding into integrated value propositions. These initiatives, taken together, will improve innovation effectiveness, efficiency, quality, and regulatory compliance.

Market Risks

Philips is in continuous dialogue with business partners to better understand their needs and to reaffirm that the innovation pipeline can meet their sustainability demands. We have raised our 2025 ESG commitments and have adopted a comprehensive ESG framework. On an environmental level we are working to minimize our impact on the planet by taking climate action, driving the transition to a circular economy, implementing EcoDesign in our products, and partnering with our suppliers to reduce their environmental footprint

Reputational Risk

Philips has a strong track record on ESG disclosures, often ahead of legislation, and has been closely involved in the development of the ESRS. The company already has reasonable assurance on all its ESG disclosures and has started a project to meet the increased requirements of ESRS. There are therefore high levels of confidence that we will be able to meet all future disclosure regulations eliminating the risk of not being able to openly communicate our sustainability achievements. The threat of litigations can be curbed effectively due to our due diligence and scrutiny from audits.

Social Risks

Philips can accurately foresee labor movements and react to them swiftly by increasing our internal flexibility. With regards to infectious diseases the Philips Group Crisis Operations team is continuously maturing and helping Philips be better prepared to respond to future events. Philips' response measures are focused on delivering on its triple duty of care:

- Safeguarding the health and safety of employees, including personal hygiene measures and safety protocols, work-from-home protocol, safe working environments, personal protective equipment, and remote servicing capabilities.
- Meeting critical customer needs, including production volume ramp-up, delivery and installation of critical equipment, fair and ethical allocation of scarce equipment and supplies, customer services, updated clinical guidance, increased cloud-enabled telehealth, remote patient engagement and hub-and-spoke models.
- Ensuring business continuity, including liquidity measures and our Business Continuity Management System covering functional operations the integrated supply chain and commercial processes.

Climate-related opportunities

The capacity of Philips to exploit climate-related opportunities, depending on each SSP scenario, is reflected in the following table.

Risk cluster	Opportunity name	Where does this opportunity reside?	Vulnerability	ID	Taking the green road (RCP1.9 & RCP 2.6)	Taking the middle road (RCP 4.5)	Taking the highway (RCP 8.5)
Regulatory	100 EUR/tonnes CO_2e	Supply Chain	Pricing GHG emissions	V06			
Regulatory	Biodiversity and Ecosystem Services	Operations	Legislation product externalities	V07			
Regulatory	Circular Economy initiatives	Supply Chain	Renewable energy and material demand	V08			
Technological	Green/EcoDesigned Innovation	Operations	Technologies for low carbon solutions	V09			
Market	Change in customer requirements	Customer	Shift in consumer expectations	V10			
Market	Sustainable Operations	Supply Chain	Shift in business partners expectations	V11			
Market	Advocate Philips' policy position to policy makers in the development of environmental regulations	Supply Chain	Shift in business partners expectations	V11			
Social	Higher demand for acute and chronic healthcare across the heathy continuum	Operations	Public health change due to environmental distress	V14			

Very low likelihood of impact **Very high likelihood of impact**

Regulatory opportunities

During the COP 21 United Nations Climate Conference in Paris in 2015, we committed to become carbon-neutral in our operations, pursue all efforts to reduce our operational emissions, source all our electricity from 100% renewable sources, and offset all unavoidable emissions by year-end 2020. We are proud to confirm that as of 2020, Philips was carbon-neutral in its operations and maintained this in 2022. We ran various scenarios with carbon prices ranging between EUR 50 and EUR 200 per ton CO_2-e and concluded that none of these scenarios comprise a material risk to Philips. As a result, Philips believes it is relatively well positioned to meet regulatory requirements stemming from the Paris agreement.

Philips recognizes the importance of a thriving biodiversity and healthy ecosystems for our company, our employees, and society as a whole. Therefore, Philips launched the Natural Capital program which is an addition to existing sustainability programs. Philips aims to restore and enhance biodiversity and ecosystem services (BES) at our sites and to actively promote ecosystem restoration activities through partnerships with, among others, NGOs, local communities, and governments. Improving BES at our sites and thereby also improving the working environment, is a contributor to making Philips the 'best place to work', one of the ESG commitments Philips announced in 2020.

For a sustainable world, the transition from a linear to a circular economy is essential. At Philips, we see huge opportunities for businesses to provide greater value to customers and our planet through innovative service models, smart upgrade paths, product take-back, refurbishing and remanufacturing programs, and software driving resource optimization, e.g. in the form of migration to the cloud, improved utilization rates and telehealth offerings. We have set ambitious targets to guide this journey. By 2025, we want 100% of our product offerings to be in line with EcoDesign requirements, 25% of our revenues to come from circular products and services, and we want to send zero waste to landfill in our own operations. At the beginning of 2018, we added a pledge to take back and repurpose all the large medical systems equipment (e.g. MRI and CT scanners) that our customers are prepared to return to us, and to extend those practices across our professional portfolio by 2025. In 2020, we successfully closed the loop on all large medical systems returned to us. Next, we aim to close the loop for all medical devices by 2025. In 2022, we reached 18% circular revenues compared to 16% in 2021.

Technological opportunities

Our Green/EcoDesigned Innovation – the Research & Development spend related to the development of new generations of Green/ EcoDesigned products and solutions and Green technologies, addressing SDG 12 (Ensure sustainable consumption and production patterns) – is focused on addressing the emissions caused by the Healthcare sector (4% of global). In 2022, Philips invested EUR 168 million in Green/EcoDesigned Innovation, comparable to 2021 due to the completion of a number of sizeable innovation projects in the course of 2021. We expect this spend to increase again in the years to come. In 2022, over EUR 1. 8 billion was invested in Sustainable Innovation.

Market opportunities

We see a growing demand from our customers, including hospitals, to reduce their environmental impact. In 2020, Philips further reinforced its commitments as a purpose-driven company with the announcement of an enhanced and fully integrated approach to doing business responsibly and sustainably. Philips has a long tradition of sustainability reporting, beginning with our first environmental Annual Report published in 1999. Sustainability is strongly embedded in our core business processes and the company is relatively well positioned to be a corporate sustainability leader. We participate in meetings and task forces as a member of organizations including the World Economic Forum, WBCSD, Responsible Business Alliance (RBA), EFRAG, Dutch Sustainable Growth Coalition, the Ellen MacArthur Foundation, European Round Table for Industry, Platform for Accelerating the Circular Economy (PACE) and the European Partnership for Responsible Minerals.

Through our EcoDesign process we aim to create products and solutions that have significantly less impact on the environment during their whole lifecycle. In 2022, Green/EcoDesigned Revenues amounted to 71.7% of sales. Overall, the most significant improvements have been realized in energy efficiency, although there was also growing attention for hazardous substances and recyclability in all segments in 2022, the latter driven by our Circular Economy initiatives.

Having achieved our 2020 carbon neutrality target, we have raised the bar and set ambitious emission reduction targets to ensure we help limit the impact of global warming, not only in our operations, but throughout our value chain – collaborating with suppliers and customers to amplify our impact. That is why Philips has set new long-term emission reduction targets, which have been assessed and approved by the Science Based Targets initiative (SBTi) – locking down our commitment to drive climate action across the value chain, from suppliers to customers, and ensuring that we contribute to the decarbonization required to keep the global temperature increase below 1.5 °C. At COP 26, we announced our plan to step up our acclaimed supplier sustainability program with the goal of having at least 50% of our suppliers (based on spend) committing to science-based targets (SBTs) for CO_2 emissions reduction by 2025. We stepped-up our commitment to reduce our scope 3 carbon emissions in line with the 1.5 degrees global warming scenario (Paris agreement). This commitment has been reviewed and approved by the Science Based Targets initiative (SBTi) in 2022.

Social opportunities

Besides the healthcare sector's natural drivers of growth – aging populations, the rise of chronic diseases, increased spending on healthcare in emerging markets – we expect a higher demand for acute and chronic diseases to climate diseases. Hence, at Philips we believe that health technology will be a major growth driver in the years to come.

At Philips, we see healthcare as a continuum – this puts people's health journeys front and center and enables integrated care pathways. Believing that healthcare should be safe, seamless, efficient and effective, we strive to 'connect the dots' for our customers and consumers, supporting the flow of real-time data needed to provide precision diagnoses, treatment and chronic care for patients. Going forward, we believe the digital transformation of healthcare and – accelerated by COVID-19 – the increasing adoption of virtual care or 'telehealth' will play a major role in helping people to live healthily and cope with disease, and in enabling care providers to meet people's health needs, deliver better outcomes and improve productivity.

Risk management

Disclose the organization's governance around climate-related risks and opportunities.

Recommended Disclosure a)

Describe the organization's processes for identifying and assessing climate-related risks.

The management of climate-related risks is integrated into our regular risk management process and included in strategic and operational risks refer to previous section, Strategy).

Refer to section 6.1: "Our approach to risk management" of the Annual Report 2022 for a description of our vision and objectives on risk, our risk management governance, and our risk appetite.

Recommended Disclosure b)

Describe the organization's processes for managing climate-related risks.

Refer to sections 5.3 "Environmental performance" and 13.1 "Environmental statements" of the Annual Report 2022.

Recommended Disclosure c)

Describe how processes for identifying, assessing, and managing climate-related risks are integrated into the organization's overall risk management.

Refer to section 6.1 "Our approach to risk management" of the Annual Report 2022 for a description of our vision and objectives on risk, our risk management governance, and our risk appetite, which includes climate-related risks.

Metrics and Targets

Disclose the metrics used by the organization to assess climate-related risks and opportunities in line with its strategy and risk management process.

Recommended Disclosure a)

Disclose the metrics used by the organization to assess climate-related risks and opportunities in line with its strategy and risk management process.

We report our climate-related metrics and targets, like operational carbon footprint and energy efficiency, but also Green and Circular Revenues, in the Annual Report 2022 as well as via www.results.philips.com. Our new long-term emission reduction targets, which have been assessed and approved by the Science Based Targets initiative (SBTi), lock down our commitment to drive climate action across the value chain and ensure that we contribute to the decarbonization required to keep the global temperature increase below 1.5°C. Climate-related metrics also form part of the long-term incentive program.

Recommended Disclosure b)

Disclose Scope 1, Scope 2, and, if appropriate, Scope 3 green-house gas (GHG) emissions, and the related risks.

Refer to sections 5.3 "Environmental performance" (Environmental impact), 5.3.1 "Green/EcoDesigned Innovation", 5.3.2 "Green/EcoDesigned Revenues", 5.3.3 "Sustainable Operations" (Carbon footprint and energy efficiency) and 8.2.2 "Remuneration report 2022" of the Annual Report 2022.

Refer to sections 5.3.3 Sustainable Operations (Carbon footprint and energy efficiency) and 13.3.3 Sustainable Operations of the Annual Report 2022.

Recommended Disclosure c)

Describe the targets used by the organization to manage climate-related risks and opportunities and performance against targets.

Refer to sections 13.1.5 "Programs and targets" and 13.3.3 "Sustainable Operations" of the Annual Report 2022.