

Climate risks and net-zero opportunities

We are a purpose-led company and are driven by our vision to create a better everyday life for the many people. Our financial independence, resilience and unique ownership structure allow us to take a long-term view of our business, investing for future generations, caring for people and planet and looking far beyond 2050.

Therefore, understanding the impact of climate change on our business, understanding the costs of mitigating actions and capturing net-zero transition opportunities is of the utmost importance to us. This year we once again report on our approach in line with the recommendations from the Taskforce on Climate-related Financial Disclosure (TCFD).

Understanding our climate-related risks and net-zero opportunities

In FY21, we updated our assessment of climate-related risks and net-zero opportunities in line with the recommendations of the Taskforce on Climate-related Financial Disclosure (TCFD). Our first assessment, which was carried out in FY19, gave us a better understanding of the strategic and financial implications for our business relating to buildings, energy and transportation. It confirmed that there are both strategic and financial gains that can be made from pursuing our commitment to become a climate positive IKEA, e.g. by continuing to improve energy efficiency in our buildings, investing in renewable energy generation, and achieving zero emission home deliveries.

Our assessment in FY21 focused on a higher number of our material climate-related risks and net-zero transition opportunities than in FY19. The scenario analysis was also updated based on the most recent climate models and the latest scientific understanding of the impacts of climate change. We used the following two scenarios

developed by the NGFS* (Network for Greening the Financial System) that span different temperature outcomes and pathways:

- **Net Zero 2050 scenario (RCP 2.6):** The world reaches net-zero by 2050, and the global temperature increase is limited to 1.5 degrees celcius by 2100 due to the immediate and smooth introduction of climate policies across the world and fast innovation. This scenario was chosen because it reflects the net-zero pathway many governments and companies have already publicly committed to. It leads to high transition risks including expected future regulation from the EU, which is our biggest market.
- **Current Policies scenario (RCP 8.5):** The global temperature increases by more than 3 degrees celcius by the end of the century because the world fails to introduce additional

“We think in generations and not financial quarters. The climate action we are taking in our business and our advocacy for achieving a net zero society by 2050 is an investment to protect the long-term future of society and our business. We know the costs to people, planet and our business will be far higher if society continues to pursue current policies and does not transition to net-zero”

climate policies beyond what is legislated today and innovation is slower than in the Net Zero 2050 scenario. This scenario was chosen because it leads to higher physical risks.



Our approach

Our assessment of climate-related risks and net-zero opportunities included the following five steps:

Step 1. We produced a long-list of climate-related risks and opportunities. The assessment built on our internal risk assessment, which includes expert input from relevant group functions and business units.

Step 2. We undertook a qualitative materiality assessment of the long-list of climate-related risks and opportunities and placed these on a heat map based on their likelihood and impact.

Step 3. We prioritized the identified risks and opportunities based on the materiality assessment and developed a short-list of risks and opportunities with high likelihood and impact. We considered both opportunities from mitigating the identified risks as well as business opportunities with imminent growth potential that are already included in our People & Planet Positive strategy.

Step 4. We identified the financial impacts of the risks and opportunities on our short-list, including costs and revenues where data was available. This was based on a combination of our internal financial and operational data and external data on scenarios.

Step 5. We have reviewed the resilience of our current business and climate-related strategy in light of the risks and opportunities, and this will feed into the development of short- and mid-term actions.

How to make our business thrive in a net-zero society

The scenario analysis shows that there are some major potential costs¹ to our business from climate change in both scenarios. At the same time there are significant opportunities for our business to thrive in a net-zero economy, by mitigating risks and harnessing new business opportunities. The scenario analysis highlights the importance of reducing greenhouse gas emissions in line with the IKEA climate positive commitment by 2030 in both scenarios.

In our scenario analysis we modelled the potential financial impact of three categories: energy and emissions, transportation² and evolving business models. We also considered (but have not yet fully quantified) physical risks to buildings and risks in the upstream IKEA supply chain, and a next step would be to quantify these more comprehensively.



“We are likely to face increased costs under both climate change scenarios if no action is taken to mitigate transition risks. However, with our ambitious climate action targets, we expect to mitigate these costs while playing our part to limit the costs to planet, people and society to 2050 and far beyond. Working towards a net-zero society is not only the right thing to do - it is the only sustainable business model for generations to come.”

¹ The financial impacts are modelled based on the assessed risks and opportunities under the two scenarios in 2050 as applied to our current business footprint and profitability. As such, they do not contemplate the potential growth and change in our underlying business by 2050. ² Covers transportation within the scope of Ingka Group – transport from warehouses to stores and home deliveries to customers.

Summary of scenario analysis

Energy and emissions and Transportation: Costs will increase in both scenarios, with a higher increase in the Net Zero 2050 scenario reflecting the increase in regulation, significant infrastructure investment, carbon pricing and energy efficiency investments that is needed. Without mitigation, this could have a cost impact of around EUR 145 million in the Net Zero 2050 scenario and around EUR 30 million in the Current Policies scenario*. However, delivering on our ambitious targets for renewable energy, zero emissions delivery and energy efficiency will completely mitigate these cost increases in both scenarios. Furthermore, our wind and solar

renewable energy businesses will likely generate better results (unquantified) in the Net Zero 2050 scenario than Current Policies.

Physical risk: In both scenarios extreme coastal and riverine flooding could lead to annual costs for the Ingka Group of roughly EUR 30 million by 2050*. In Current Policies this risk in 2050 is slightly worse than Net Zero and is expected to be significantly worse by 2100. In addition, unquantified impacts from extreme weather events like pluvial flooding, heatwaves and storms are expected to increase in frequency and would be worse in a Current Policies scenario.

Evolving business models: Up to 18% of our customers are willing to make a 'strong effort' to make future changes to their behaviour to help reduce climate change. If we fail to meet expectations, we could risk losing significant sales and profitability.

We believe that the opportunity here is greater than the risk, and that scalable and disruptive business models promoting circular resource use and renewable energy for customers have huge potential.

Supply chain: There are material potential impacts on our business related to resource scarcity and damage to the ecosystems we rely on. This could affect the costs and availability of raw materials such as wood and cotton in the IKEA products we sell.

We have not yet quantified the financial impact of this on our business. However, third-party

Our approach to managing climate-related risks and net-zero transition opportunities

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- ▶ **Governance** We have integrated climate-related matters into our governance. Read more about our sustainability governance. To ensure we make progress on our climate targets, a Climate Taskforce was established in FY21 to coordinate the integration of climate-related matters at a strategic and operational level.
- ▶ **Strategy** As the largest IKEA retailer, we contribute to the IKEA climate positive commitment. We assess climate-related risks and decarbonisation opportunities and use the findings to influence strategies and short- and medium-term business planning (see above).
- ▶ **Risk management** Climate-related risks are integrated into the Ingka Group risk management framework. Read more about how we manage sustainability risks.
- ▶ **Metrics and targets** We've set ambitious science-based targets to reduce our scope 1 and 2 emissions in absolute terms and to reduce relative emissions from our indirect (scope 3) travel and transport footprint. IKEA has set science-based targets to reduce emissions in absolute terms for the IKEA product range. We regularly track climate change metrics. See Progress against targets.

independent land use models indicate that wood prices are expected to increase under both scenarios, while cotton prices are expected to decrease slightly.

For a more detailed overview of the risks and opportunities assessed, see the tables on next pages.



* Based on our current business footprint.

Main findings of our climate change scenario analysis

| Categories | | Levers | Net Zero | Current policies | |
|----------------------|---------------|---|--|---|---|
| Energy and emissions | RISKS | Electricity prices | Electricity costs increase 60% by 2050, peaking in 2040 at 85% above 2020 levels | Electricity costs increase 12% by 2050 | Combined, planned energy efficiency measures, switching to renewable heating and cooling, and generation of renewable electricity fully mitigate the electricity and carbon price risk under both scenarios. |
| | | Carbon costs across Ingka markets (based on projected carbon taxes) | 14x increase in carbon prices by 2050 in Ingka markets to achieve net-zero across the economy, resulting in additional costs for Scope 1 emissions | 4x increase in carbon prices by 2030 reflecting current policies, then flatten out afterwards | |
| | | Building energy efficiency | Significant investments in capital investment required to achieve commercial building energy intensity required under this scenario | Minor investments in capital investment required to achieve commercial building energy intensity requirements under EU Fit for 55 policies | |
| | OPPORTUNITIES | Maximized energy efficiency | Planned initiatives would fully mitigate the electricity and carbon price risk by saving up to EUR 130 million* in energy costs in 2050 | Planned initiatives would fully mitigate the electricity and carbon price risk by saving up to EUR 75 million* in energy costs in 2050 | |
| | | Revenue from existing and future renewable energy generation (wind farms and solar) | Revenue expected to increase with electricity price rise | Revenue expected to increase with electricity price rise, a lower rise than in Net Zero scenario | |
| Transportation | RISKS | Carbon price | EUR 35 million* in carbon costs by 2050 if fleet is not zero emission | EUR 10 million* in carbon costs in 2050 if fleet is not zero emission | Transport-related carbon costs can be mitigated by the transition to zero emission deliveries initially come at a higher price, but costs fall over time. |
| | | Fleet electrification costs | Ingka pays a premium for near-term zero emission delivery, resulting in higher annual operating costs in most locations. However, between 2025 and 2035, projections are that costs of zero emissions vehicles fall, making them cheaper than diesel/petrol vehicles | | |
| | OPPORTUNITIES | Fleet decarbonisation | EUR 35 million* in carbon costs avoided in 2050 since fleet will be zero emission | EUR 10 million* in carbon costs avoided in 2050 since fleet will be zero emission | |

* Based on our current business footprint.

| Categories | | Levers | Net Zero | Current policies | |
|---|-------------------------|--------------------------------|---|---|--|
| Evolving business models | RISKS | Consumer buying habits | Between 6% and 18% of surveyed consumers ¹ are already taking a lot of action to reduce climate change, or are willing to do so. If they perceive the IKEA offer to be unsustainable or if they find competitors to have a more relevant offering, we risk losing part of our customer base. | | Circular services have potential to grow our business. 19% of customers state that they already buy second-hand all or most of the time ² . The market growth rate for furniture leasing services is high. |
| | | Product carbon track and trace | Requirements related to product transparency, such as product carbon track and trace, could mean increased costs for retailers. | | |
| | OPPORTUNITIES | Circular business models | Development and expansion of second-hand furniture sales and circular Furniture as a Service offerings enables participation in a new market that targets new customer segments. If market share and profitability in these markets could match Ingka's FY21 market share and profitability, this could generate significant profits in 2030 and beyond . | | |
| | | Clean energy services | A Net Zero scenario shows strong residential solar PV capacity additions peaking in 2030 , potentially leading to significant revenues. | Market growth less important than Net Zero scenario with potential revenue peaking in 2030. | |
| Physical risks | RISKS | Damage to Ingka property | Riverine and coastal flooding ³ due to climate change could cause a rise in building damages, estimated at just under EUR 30 million* in 2050 | Riverine and costal flooding due to climate change could cause a rise in building damages, estimated at over EUR 30 million* in 2050. Effects expected to worsen post-2050. In addition, unquantified impacts from extreme weather events like heatwaves and storms would be worse in Current Policies than in Net Zero scenario. | |
| Supply chain risks (not yet quantified) | RISKS AND OPPORTUNITIES | Raw material prices | Global wood and cotton prices may face upward pressure from increased regulation, high demand and climate impacts on yields, which might be partly mitigated by innovation e.g. smart crop production practices. Steel prices will likely be impacted by carbon pricing. The financial impact for Ingka of any global commodity price increases will be a function of our ongoing product and materials innovation and broader Circular IKEA transformation. | | |

* Based on our current business footprint. ¹ According to our [2021 Climate Action Research](#), 6% of surveyed consumers are already taking 'a lot' of action in their daily lives to help reduce climate change, in 2021 and 18% are willing to make a 'strong effort' to make future changes to their behaviour to help reduce climate change, in 2021. ² According to our [2021 Climate Action Research](#). ³ Pluvial flooding, heat waves and storms were not quantified as part of the scenario analysis.