2024 White paper Executive summary

outokumpu

Beyond Green:

5 SHIFTS SHAPING THE STEEL INDUSTRY

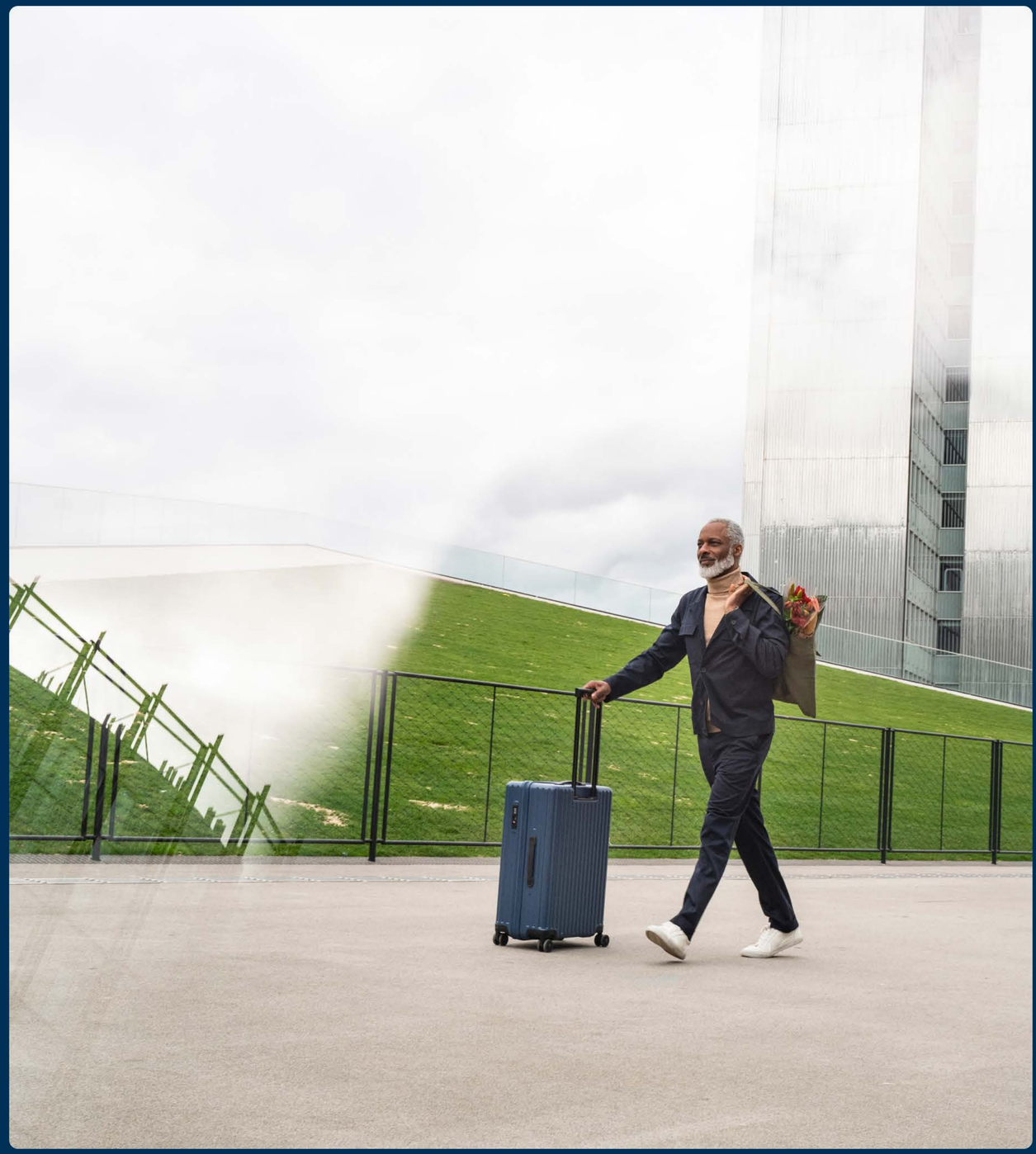
– from Green Transition to Everlasting Era

The world is undergoing a profound industrial revolution aimed at significantly reducing environmental impact. When we look at the entire steel sector, it is a steel-hard fact that the industry currently accounts for 10% of global greenhouse gas emissions – yet our society will still require significant amounts of energy and steel in the future.

How does the future of steel – both for carbon and stainless – look like? The report identifies five critical shifts for leading the industry into a new era – going beyond green, towards everlasting:

SHIFT 1. The focus is on carbon, for now
SHIFT 2. A hotter (geopolitical) climate
SHIFT 3. On the brink of full circularity
SHIFT 4. Manufacturing the demand
SHIFT 5. Aesthetics of the future

The report includes insights drawn from interviews with key stakeholders, primarily at the C-level, across the steel industry value chain.



NAVIGATING THE TRANSITION

A critical forward-looking perspective for all companies and organizations involved in the green transition is the need to fully grasp the scale and depth of this transformation. It goes far beyond simply improving materials or reducing emissions. While addressing these aspects is essential, the chapter on geopolitics illustrates that the energy transition is fundamentally reshaping power dynamics and ushering in an era of new business philosophies. Circular business models that optimize waste streams, advanced product traceability, carbon accounting, and capture are just a few examples of the emerging business environment.

This is where the concept of strategic drift becomes particularly relevant[1]. As the transition accelerates, the volume and pace of changes that organizations must adapt to increase significantly. Consequently, current strategies often become progressively less effective at responding to external challenges.

The green transition is one of the primary drivers of industrial transformation in the 21st century. The convergence of stricter environmental regulations, industrial policies, innovative technologies, and shifting consumer preferences is pushing many organizations toward a collective strategic drift. Recognizing which phase of change an organization is in is crucial for initiating transformational change. The organizations that succeed will be those that acknowledge the flux stage and boldly adopt new strategies aligned with 21st-century business philosophy.

[1] Johnson, Scholes & Whittington. Exploring Corporate Strategy. 2005

KEY INSIGHTS FROM EVERY SHIFT

SHIFT 1:
FROM CARBON REDUCTION TO SUSTAINABILITY EXPANSION

Sustainability scopes are expected to continue growing in the long term, our earth system depends on it. While carbon has been the primary focus, biodiversity, water but also social cohesion is likely to emerge as the next major areas of interest and innovation. The steel industry must recognize that the definition of sustainability is constantly expanding and adapt accordingly.

Key future questions

1. How does your organization leverage decarbonization innovations to also benefit other environmental aspects?
2. How can your organization finance its green transition and what will be the cost if you do not?
3. What kind of pricing mechanisms and regulation do you need to accelerate sustainability?

SHIFT 2:
FROM GEOPOLITICS TO POLICY

Despite the uncertainty in the world and concerns about the future of globalization, maintaining a stable regulatory environment is crucial for the industry's success. Policymakers should prioritize long-term stability over short-term political wins and forget the importance of industrial sustainability transformation policy at home when the focus on geopolitics is high.

Key future questions

1. Considering your organization’s current supply chains and the potential division of the global value chain into regional blocks, which specific regions or countries are likely to become increasingly critical for your operations? What proactive steps can you take to strengthen your presence and partnerships in these regions to ensure long-term resilience and competitiveness?
2. As the energy transition reshapes global power dynamics, what specific risks and opportunities does it present for your organization?
3. How can your organization contribute to making the green transition more visible, exciting, and appealing to the public? What innovative education, and engagement strategies can you employ to build broader enthusiasm?
4. How can you turn the green transition into a new competitive advantage and ensure green growth?

SHIFT 3:
FROM CIRCULAR LEADER TO CIRCULAR ENABLER

Steel holds the distinction of being both the world's most recyclable and most recycled material, placing the industry at the forefront of the circular economy. To continue leading by example, steel companies must advance along the circularity value chain, surpassing basic recycling practices and investing in circular innovations. This approach will safeguard the positive demand for steel products in the face of competition from alternative materials.

Key future questions

1. What does it mean for our bottom line to be a leading circular industry?
2. What is the next frontier in circularity and circular business models for the industry? Who is leading?
3. How can new value propositions be created that move up the circularity value chain?

KEY INSIGHTS FROM EVERY SHIFT

SHIFT 4:
FROM SHAMING PLAYERS TO CHANGING THE GAME

The green transition comes at a price, and as most investments, it carries high initial costs. The costs should be shared among stakeholders, with governments playing a vital role in ensuring long-term support. By internalizing externalities, guaranteeing demand, and supporting innovative ventures, we can overcome the green premium trap and accelerate the transition to a pragmatic, sustainable economy – shifting the game from one of guilt and sacrifice to one of aligned incentives and long-term prosperity.

Key future questions

1. How can you redesign your business model to align incentives with sustainable practices and overcome the green premium trap?
2. What role can your organization play in advocating for policies and regulations that internalize environmental and social externalities?
3. How can you tap into government spending and procurement to drive demand for your sustainable offerings?
4. How can you more efficiently convey the use of sustainable but invisible materials to citizens?

SHIFT 5:
FROM “MADE IN EU/USA” TO “MADE TO LAST”

To gather public interest, the green transition needs an aesthetic rebrand, shifting from "green" to "everlasting." The transition must be tangible and visible to the public. Industrial leaders, in collaboration with design and cultural leaders, should define the main features of this everlasting era. This new branding should go beyond traditional labels like "made in Europe" or "made in USA," and instead emphasize "made to last," highlighting the enduring nature of sustainable products and practices. The transformation must make the invisible visible.

Key future questions

1. How can you make the sustainable transition more tangible and emotionally resonant for your customers and stakeholders?
2. What role can aesthetics play in signaling your commitment to sustainability and shaping the everlasting era?
3. How can you collaborate with upstream and downstream partners to lead the charge in making the sustainable transition visible and desirable?

“To follow the next transformation path, we need to make the invisible visible. The question is: who will lead it?”

JOHANN STEINER
Executive Vice President for Sustainability, Strategy and People at Outokumpu

ABOUT THIS REPORT

The research report was commissioned by Outokumpu and conducted by Kairos Future between June-September 2024, utilizing a blend of desk research, C-level interviews, AI, and data analysis.
The report has focused mainly on the Western world.

We would like to thank all industry experts who took part in the interviews:

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Outokumpu is the global leader in sustainable stainless steel. Our business is based on the circular economy: our products are made from 95% recycled materials, which we then turn into fully recyclable stainless steel. We are committed to the 1.5°C target to mitigate climate change, and with up to 75% lower carbon footprint than the industry average, we support our customers to reduce their emissions. Outokumpu Corporation employs approximately 8,500 professionals in close to 30 countries, with headquarters in Helsinki, Finland and shares listed in Nasdaq Helsinki. Read more: www.outokumpu.com

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