RESEARCH AND EMERGING TOPICS

FAST FASHION

transition risk

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WHO IS WORST / MOST EXPOSED?

Rank	Brand	Avg carbon cost (€M / year)
1	**H&M**	**6,52**
2	Zara	6,09
3	Forever 21	6,07
4	Uniqlo	5,85
5	Shein	5,39

Why this matters for investors ?
H&M faces the highest financial exposure to carbon pricing, making operating margins particularly sensitive to future regulatory tightening.

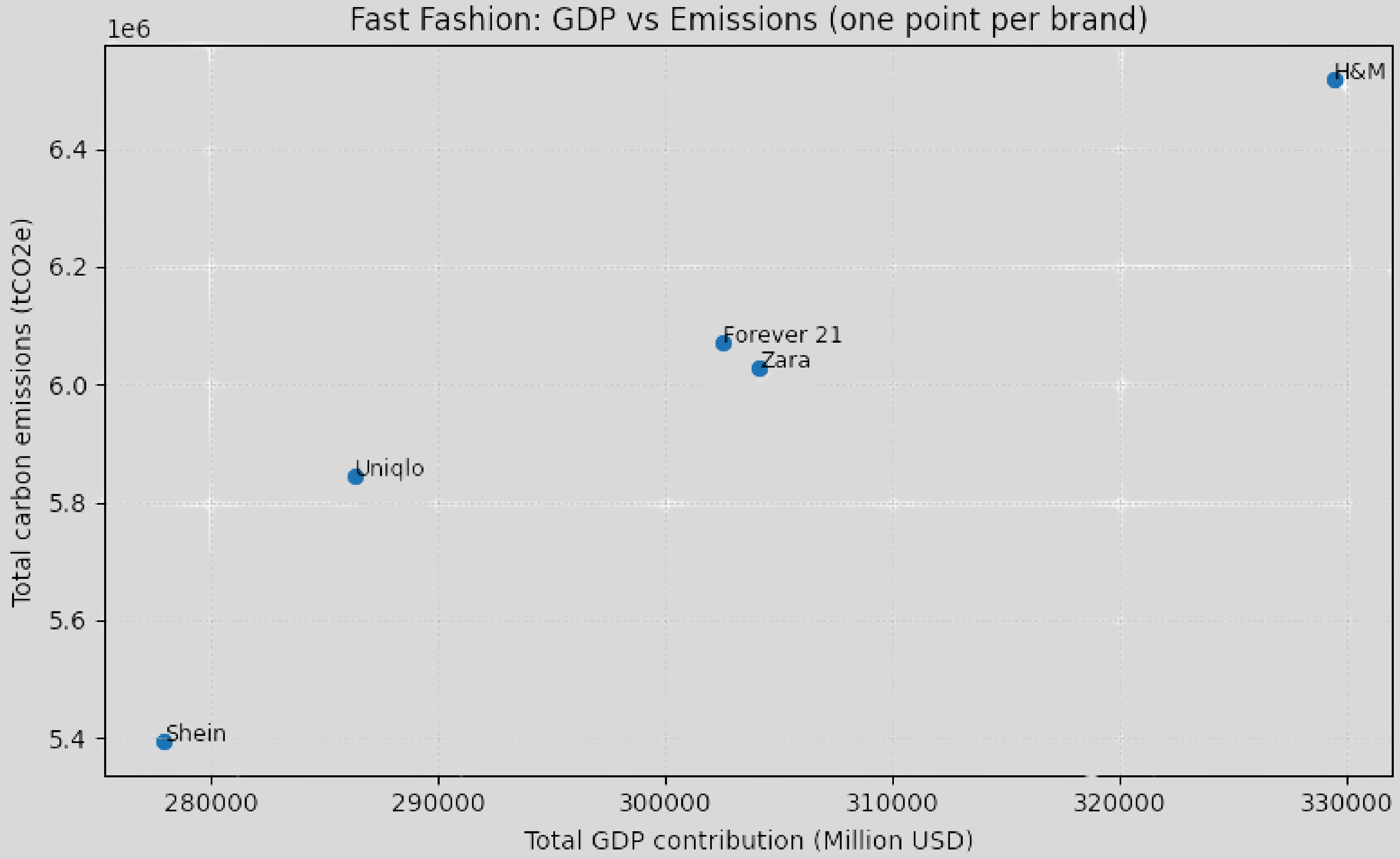
WHO IS MOST SUSTAINABLE FOR THE SAME GDP IMPACT?

Optimal zone:

Lower-left quadrant (low emissions, high GDP efficiency)

Key insight :

Zara achieves the lowest emissions per unit of GDP (20.24 tCO_2e per $1M GDP), making it the most carbon-efficient brand in the sample.



INSIGHTS THAT DRIVE DECISIONS

DECARBONIZATION TARGET: SHEIN

Highest emissions-to-GDP ratio (24.19), margins highly vulnerable to carbon pricing

BEST PRACTICE BENCHMARK: ZARA

Strong carbon efficiency despite high production scale

KEY DRIVERS OF ESG EXPOSURE:

o Carbon efficiency (CO_2 / GDP)
o Production intensity
o Supply-chain structure

QUICK WINS:

o Reduce production cycles
o Improve supply-chain efficiency
o Prioritize carbon efficiency over volume growth

WHY DECARBONIZATION MATTERS?

- Carbon pricing turns emissions into a direct financial cost
- Low transparency increases regulatory risk
- Low carbon efficiency → carbon costs absorb a larger share of profits

DIAGNOSTIC: SHEIN INDONESIA

Why? Shein shows the highest emissions to GDP ratio in the sample → weak carbon efficiency
This means the brand generates less economic value per unit of CO_2 emitted

- Low transparency and ESG scores → high transition risk
- Production model driven by volume and fast cycles

OPERATIONAL ROADMAP (12–24 MONTHS)

0-6 MONTHS

- Improve ESG disclosure
- Standardize emissions
- Regulate labor metrics

6-12 MONTHS

- Reduce return rates
- Improve quality control

12-24 MONTHS

- Reduce release cycles
- Lower production intensity

Actions are prioritized by speed of impact and implementation cost

EXPECTED BUSINESS GAINS

- Lower exposure to future carbon pricing
- Margin protection without having a heavy CapEx
- Stronger ESG credibility (to both regulators and investors)

RESILIENCE

RISK

CONCLUSION

- Transition risk in fast fashion is primarily driven by carbon efficiency rather than absolute emissions
- Benchmarking shows large differences in vulnerability across brands, with models that have low-efficiency and low-transparency facing the highest exposure
- Operational and strategic actions show that decarbonization can reduce risk while still keeping business performance