

Raiffeisen Bank International

Resilient Future Day

Turning Sustainability into Strategic Readiness & Competitive Advantage

Raiffeisen Bank International

Setting the scene

Starting keynote



10 November 2026

INTERNATIONAL SUSTAINABLE FINANCE CENTRE

Investing in resilience

A strategic opportunity for Europe

Linda Zeilina-Cross

The bumpy road ahead

Latest developments & what to expect going forward

Politics

- Largest revisiting of global order and alliances in our lifetime
- The great polarisation
- Demographics & inequality

Technology

- The arrival of AI
- The risk of wealth concentration vs labour market changes due to AI
- Cleantech and electrification

Clean-tech investment & industry
Where Europe's clean-tech capital flows – and where it falls short

Transition finance
Capital financing the decarbonisation of the existing economy

The investment gap
What Europe needs versus what it mobilises – overall and by sector

Returns
Sectors and themes that outperformed in 2025

Latest signals – November 2026
Fund flows and public opinion, published 2–8 November 2026

Capital flows deep dive
EU Platform on Sustainable Finance – Monitoring of Capital Flows, Oct 2026

Europe's geostrategic leverage
Pooling economic weight with like-minded partners

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Investment vs needs

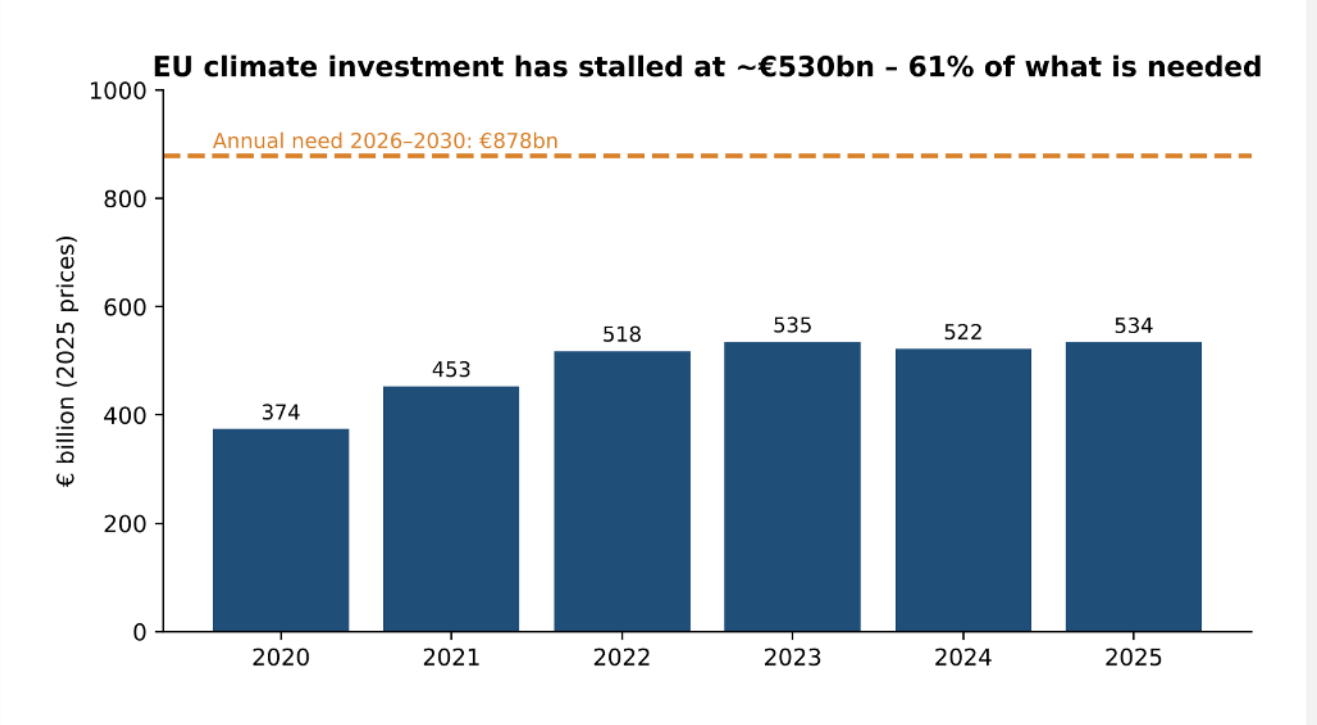
EU climate investment has stalled at ~€530bn – 61% of what is needed

What is needed until 2030

Climate investment in energy, buildings, transport and clean-tech manufacturing rose sharply to 2022, then stagnated. 2025 investment (€534bn) covers 61% of the €878bn needed each year to 2030.

Issues with the “Omnibus” impact

- Investment grew from €374bn (2020) to €518bn (2022), then flatlined
- Annual needs 2026–2030: €878bn (2025 prices)
- The plateau – not the level – is the core concern



Source: I4CE (June 2026), The State of Europe's Climate Investment – 2026 edition. i4ce.org (Figures 1–2).

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The climate gap

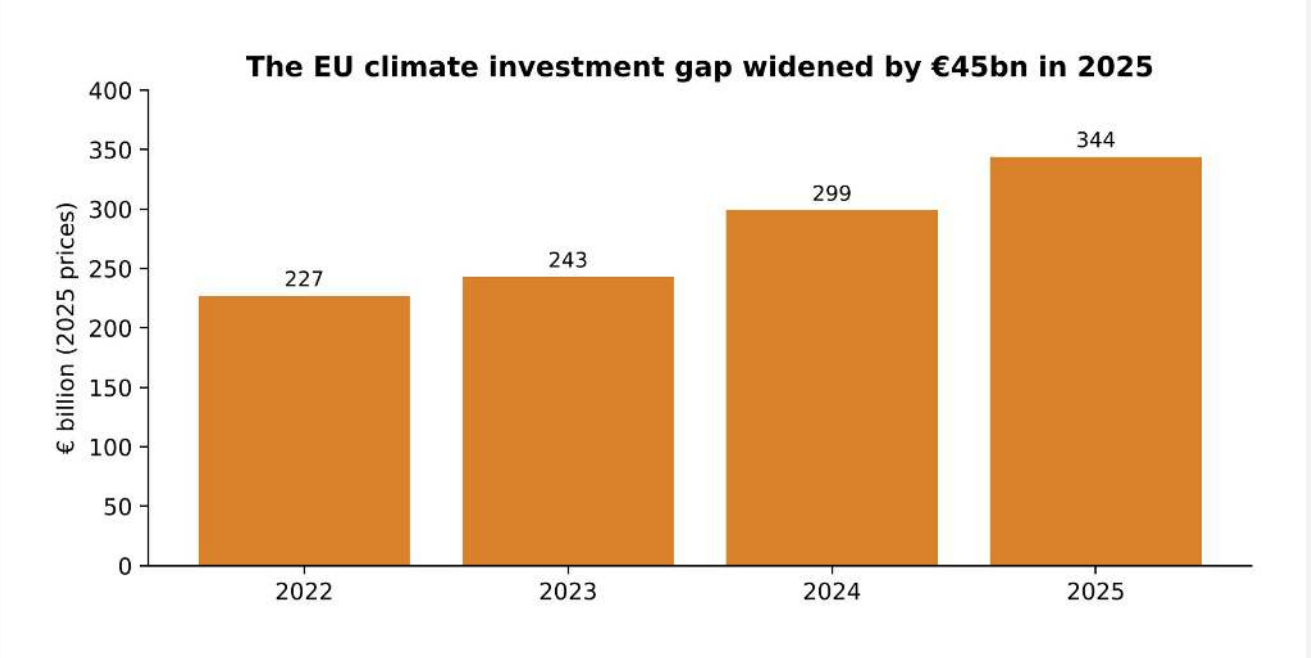
The EU climate investment gap widened by €45bn in 2025

The gap exists but estimates vary

At constant scope and methodology, the annual gap between investment needs and actual investment grew from €227bn (2022) to €344bn (2025).

The next EU budget will be different

- The gap has widened every year since 2022
- A €344bn annual shortfall is roughly two-thirds of current investment
- **Closing it requires both more public anchoring and more private mobilisation**



Source: I4CE (June 2026), The State of Europe's Climate Investment – 2026 edition. i4ce.org (Figure 3).

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Gaps by sector

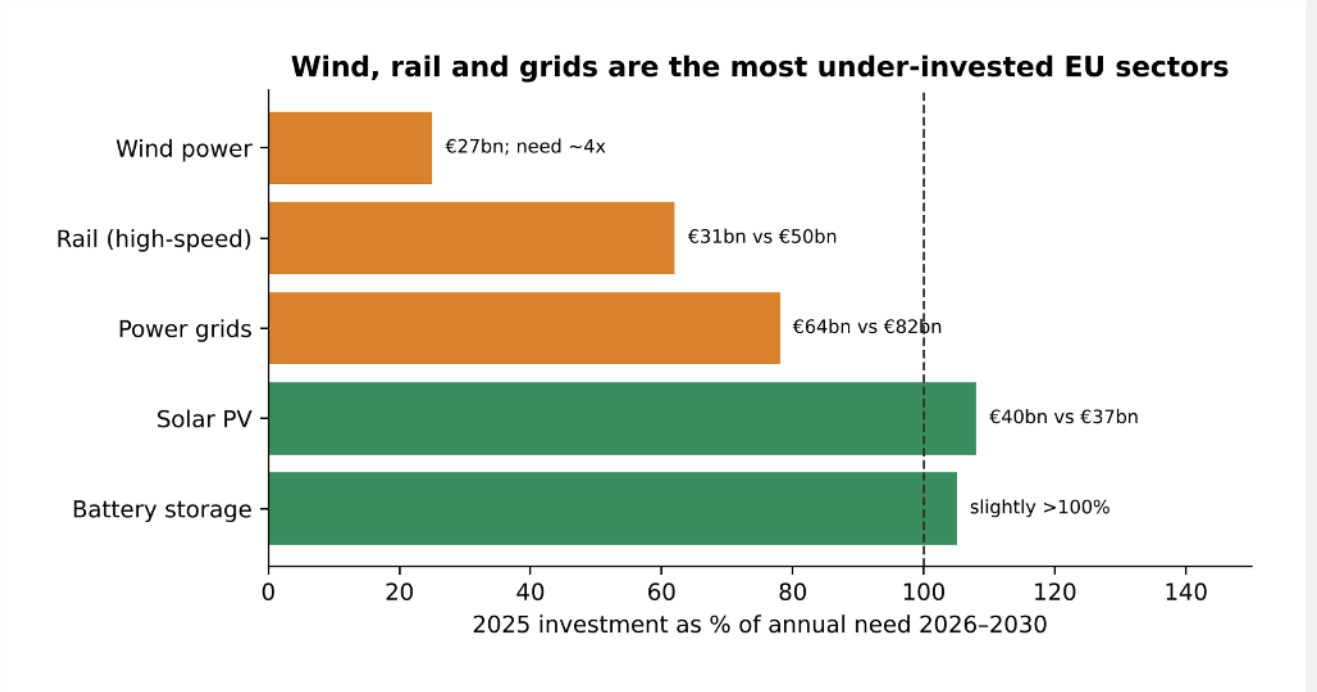
Wind, rail and grids are the most under-invested EU sectors

Focus on the energy infrastructure

2025 investment as a share of annual needs to 2030: wind covers only ~25% (€27bn), high-speed rail ~62% and grids ~78%. Solar PV and batteries are at or above needs.

The upside – opportunities in EU

- Wind investment would need to rise around fourfold
- Rail (€31bn vs €50bn) and grids (€64bn vs €82bn) also fall well short
- Building renovation would need to more than double



Source: I4CE (June 2026), State of Europe's Climate Investment 2026, launch webinar slides. Solar and battery bars approximate.

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Investment per capita

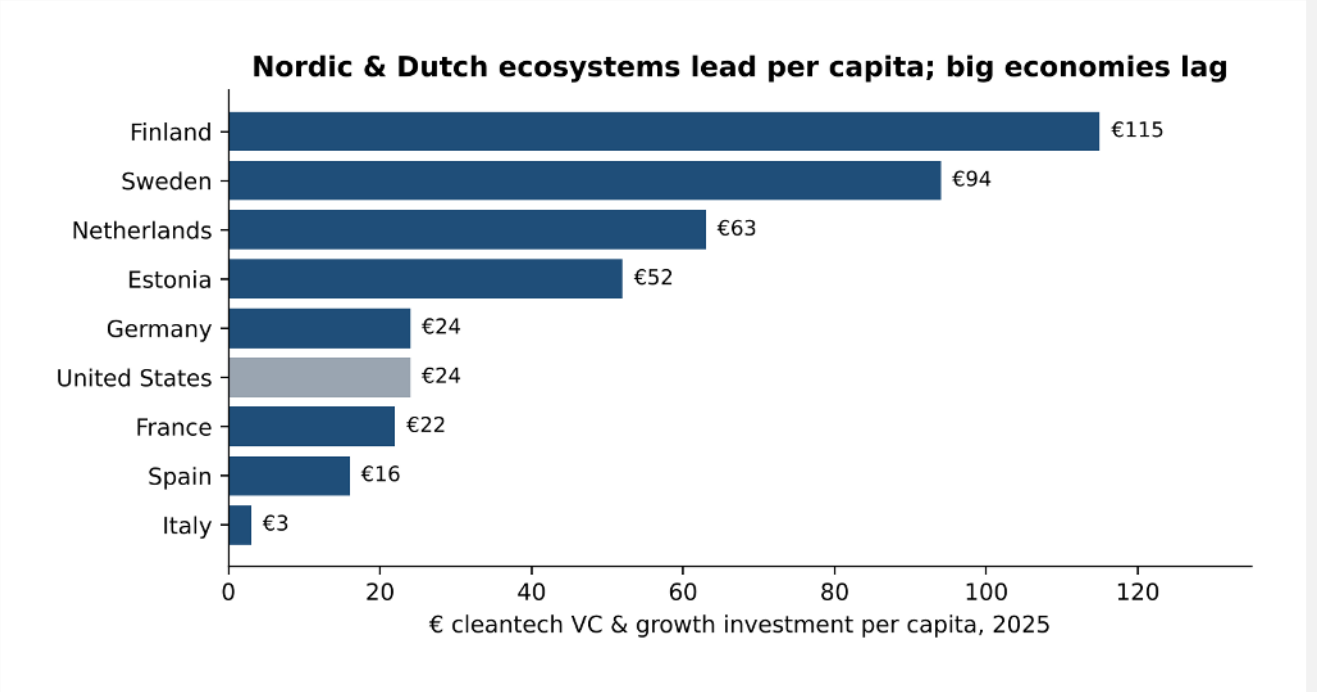
Nordic and Dutch ecosystems lead; the big economies lag

The risk of under-investment in EU

Cleantech VC and growth investment per head in 2025: Finland €115, Sweden €94, the Netherlands €63 and Estonia €52 – far ahead of France (€22), Spain (€16) and Italy (€3).

European countries remain very different – a patchwork of national ecosystems

- **Small, well-networked ecosystems punch far above their weight**
- **Germany matches the US at €24 per capita**
- Large economies such as Italy and Spain show substantial untapped potential – not even talking about CEE economies



Source: Cleantech for Europe (2026), EU Cleantech Annual Briefing 2025. cleantechforeurope.com/publications/cleantech-annual-briefing-2025

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2025 investment mix

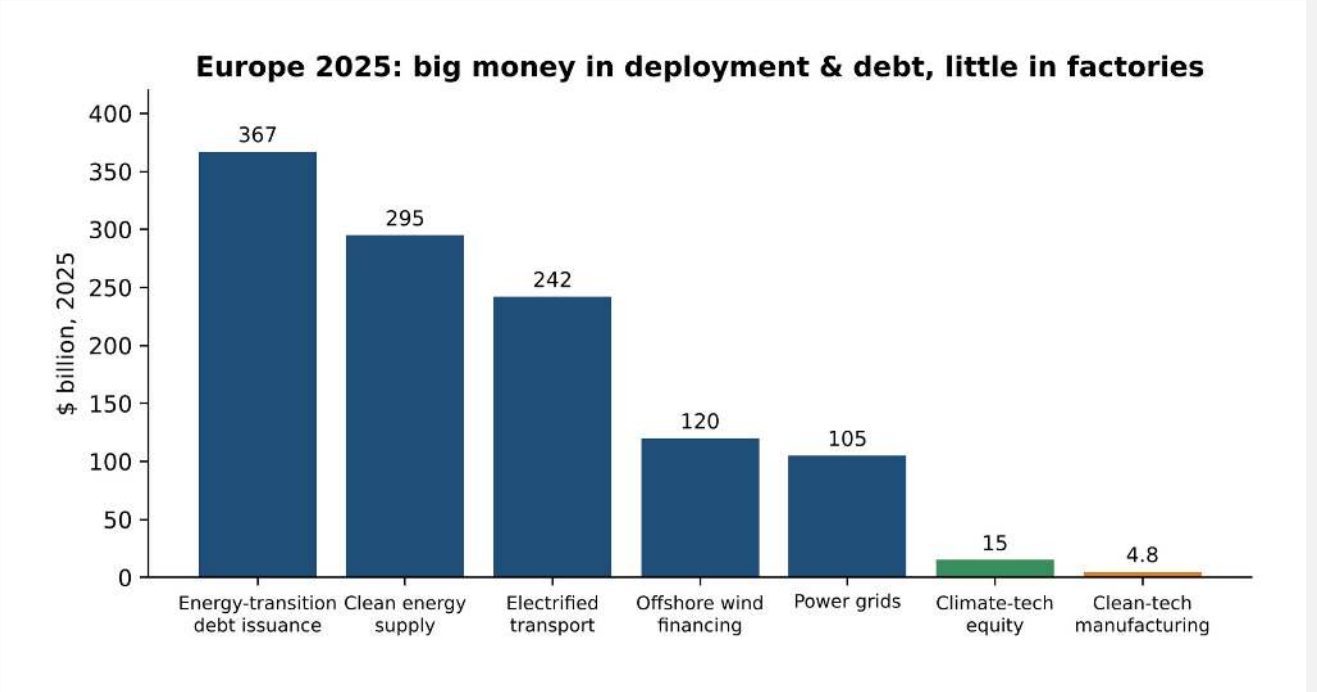
Big money in deployment and debt, little in factories

Energy transition

Energy-transition debt issuance ($367bn) and deployment dominate Europe's 2025 figures. Climate-tech equity rose 61% to $15bn; clean-tech manufacturing grew 50% but only to $4.8bn.

Electrification will offer many opportunities to drive down energy demand & improve efficiency

- Clean energy supply ($295bn) and electrified transport ($242bn) lead deployment
- Manufacturing remains a sliver of the total despite strong growth
- Categories overlap and should not be added together



Source: BloombergNEF Europe energy-transition investment analysis (Mar 2026), as reported by TGS4C and Energy Live News / Pulse.

Green bonds & lending

Debt markets carry most of Europe's green and transition finance

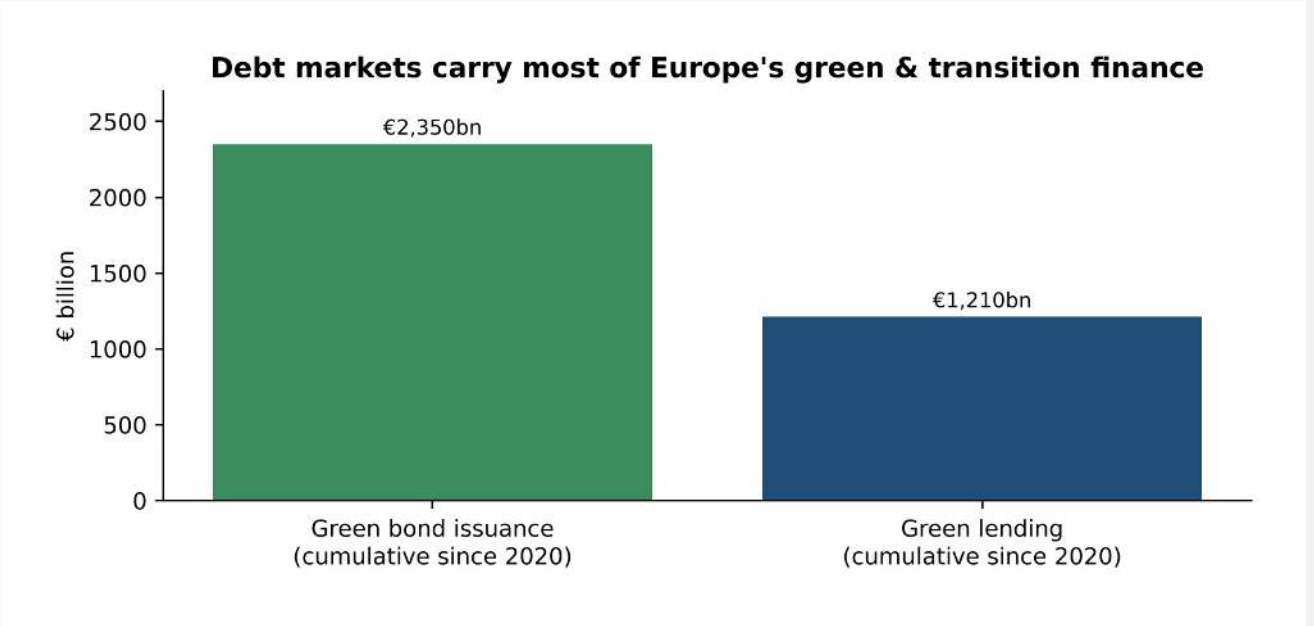
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Green lending in focus

Since 2020 Europe has recorded €2.35tn of green bond issuance and €1.21tn of green lending. EU bank green lending reached €1.23tn in 2024 (+36% year on year).

Green & sustainability-linked lending is useful for tracking capital flows & showing transition efforts

- Debt instruments dominate sustainable investment flows
- Green bond issuance is almost double cumulative green lending
- Banks' green books are growing fast – a key lever for CEE markets



Source: EU Platform on Sustainable Finance (Oct 2026), Monitoring capital flows to sustainable investments – 2nd edition, as summarised by ISFC and Generation Impact.

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EuGB issuance

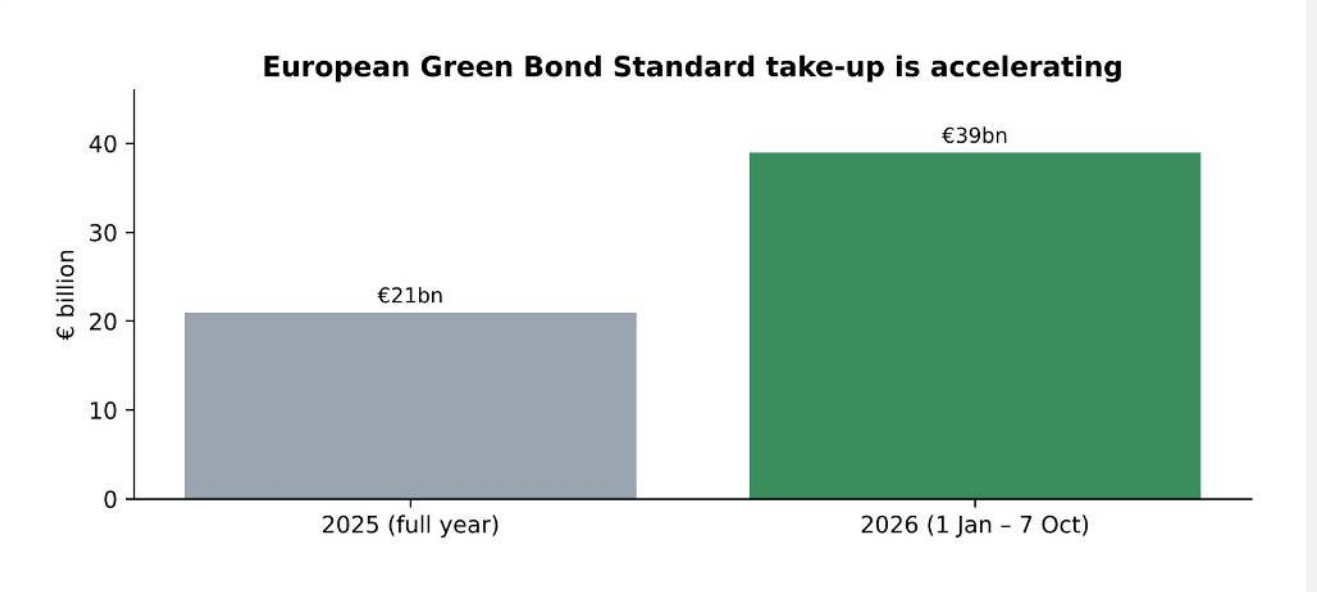
EuGB take-up is accelerating

EU Green Bonds as a gold standard

EuGB-labelled issuance reached ~€39bn in the first nine months of 2026, versus €21bn in all of 2025 – about €60bn cumulative since December 2024.

The extra effort for issuing an EUGBS gives assurance to the buy side

- 2026 issuance is already almost double the full 2025 total
- EuGB accounted for 14% of EU green bond issuance in Q2 2026
- The voluntary gold standard is gaining traction faster than many expected



Source: European Commission data release (20 Oct 2026), as reported by Serrari Group and Generation Impact.

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Green bond issuers

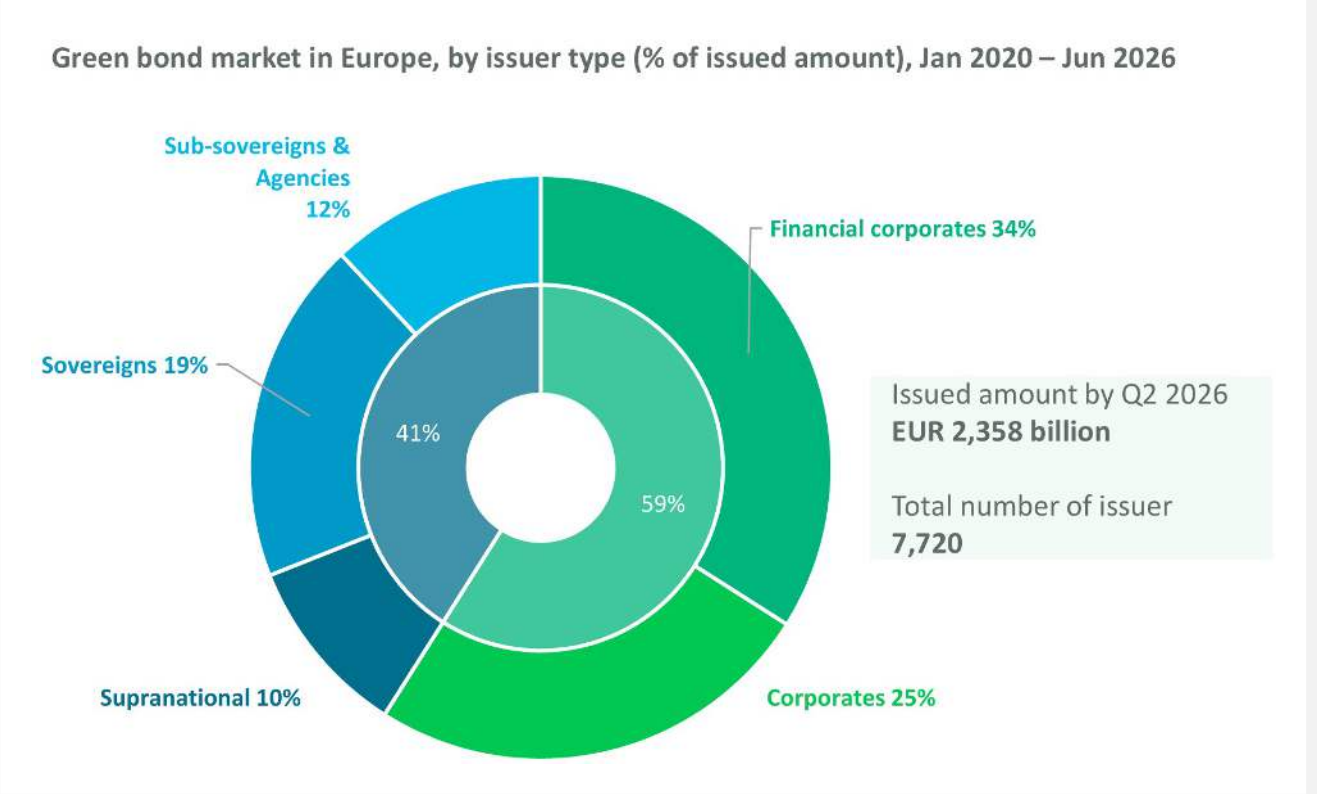
Financial corporates and the public sector dominate

The split of issuers

Share of European green bond issuance by issuer type, Jan 2020 – Jun 2026 (€2,358bn in total): financial corporates 34%, corporates 25%, sovereigns 19%, sub-sovereigns & agencies 12% and supranationals 10%.

Countries have an opportunity

- Public sector issuers together account for 31%
- **Bank-issued green bonds help fund green mortgages and renovations**
- Limited 'greenium' keeps some large issuers in conventional bonds



Source: EU Platform on Sustainable Finance (Oct 2026), Monitoring of Capital Flows to Sustainable Investments, p. 40. Data: LGX DataHub, Luxembourg Stock Exchange, as of June 2026, incl. matured bonds.

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Use of proceeds

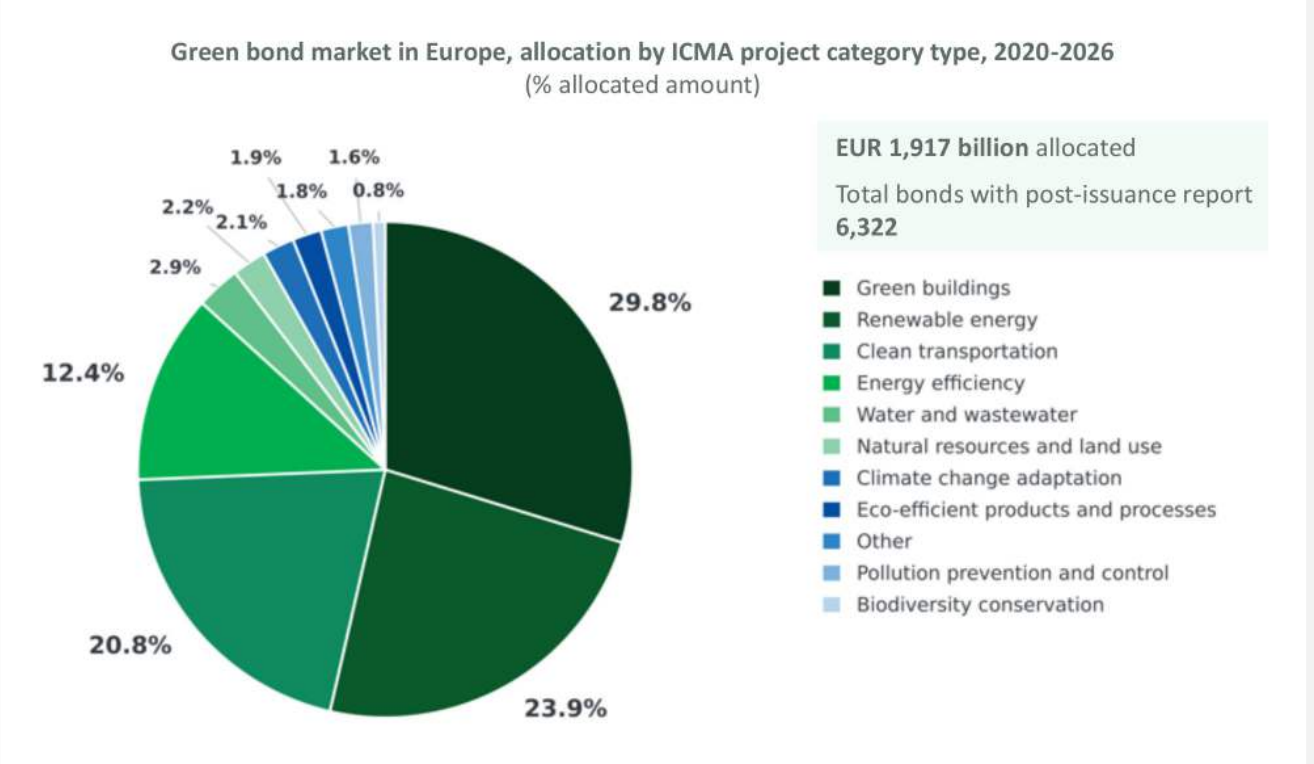
Buildings, renewables and clean transport take most proceeds

Some sectors are best suited for green bonds

Of €1.92tn allocated in post-issuance reports since 2020 (6,322 bonds), green buildings received 29.8% (€572bn), renewable energy 23.9% (€458bn), clean transport 20.8% and energy efficiency 12.4%.

Long maturity & capex-focus

- The top four categories account for 86.9% of allocations
- Green bonds suit capex-intensive projects with long maturities
- **Adaptation, biodiversity and pollution prevention remain marginal**



Source: EU Platform on Sustainable Finance (Oct 2026), Monitoring of Capital Flows to Sustainable Investments, p. 41. Data: LGX DataHub, Luxembourg Stock Exchange, as of June 2026, incl. matured bonds.

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2025 winners

Defence, banks and electrification outperformed

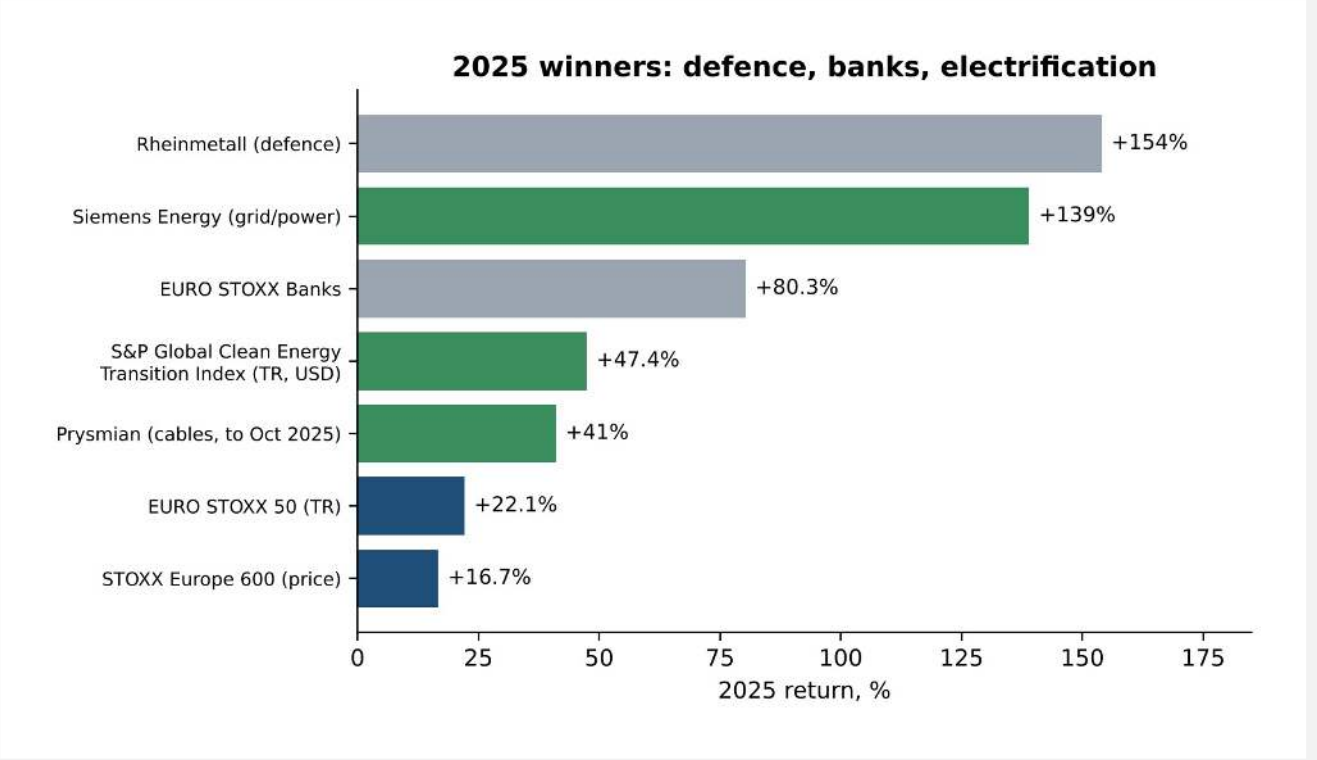
The sectors that benefit follow policy signalling

European equities had their best year since 2021, but gains were concentrated:

- Rheinmetall +154%,
- Siemens Energy +139%,
- EURO STOXX Banks +80% (best since 1987).
  Green bars = energy-transition themes.

Electrification will be a priority in the EU

- **Electrification and grid suppliers were among the biggest winners**
- Global clean-energy equities rebounded ~47% but remain far below 2021 highs
- **A lot will depend on how the next EU budget will be implemented** – and how businesses leverage it for business model transformation financing



Source: STOXX (Jan 2026); Callaway Climate Insights; Bloomberg via Cryptopolitan; Reuters via Devdiscourse. Not investment advice.

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Infrastructure returns

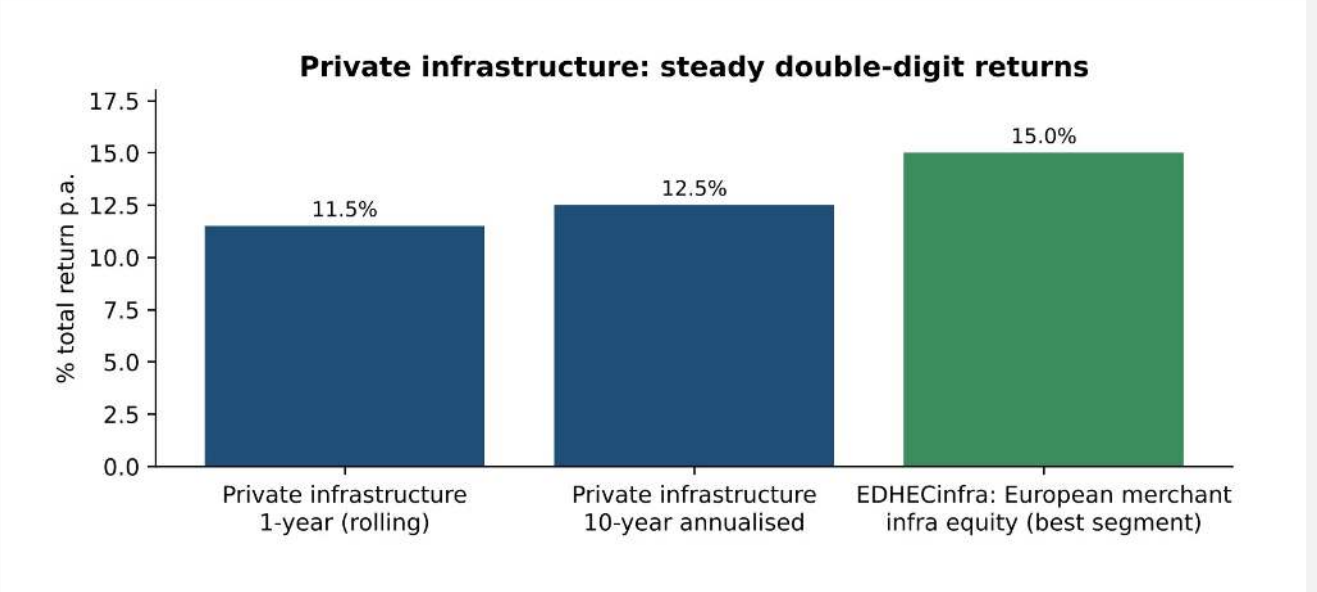
Private infrastructure: steady double-digit returns

Private infrastructure in focus

The MSCI Private Infrastructure Index (500+ assets) shows 11.5% rolling one-year and 12.5% annualised ten-year returns; EDHECinfra found merchant infrastructure equity (~15%) the best European segment.

EU attracts investment in some sectors

- Returns ahead of public equities, global bonds and listed infrastructure
- Europe attracted >80% of infrastructure fund commitments in 2025
- **Renewables and digital are a larger share of deal flow in Europe than in the US**



Source: White & Case (2025), citing MSCI and PitchBook/Preqin; EDHECinfra via Infrastructure Investor (2017, long-run data).

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European fund flows

Third consecutive quarter of inflows into European sustainable funds

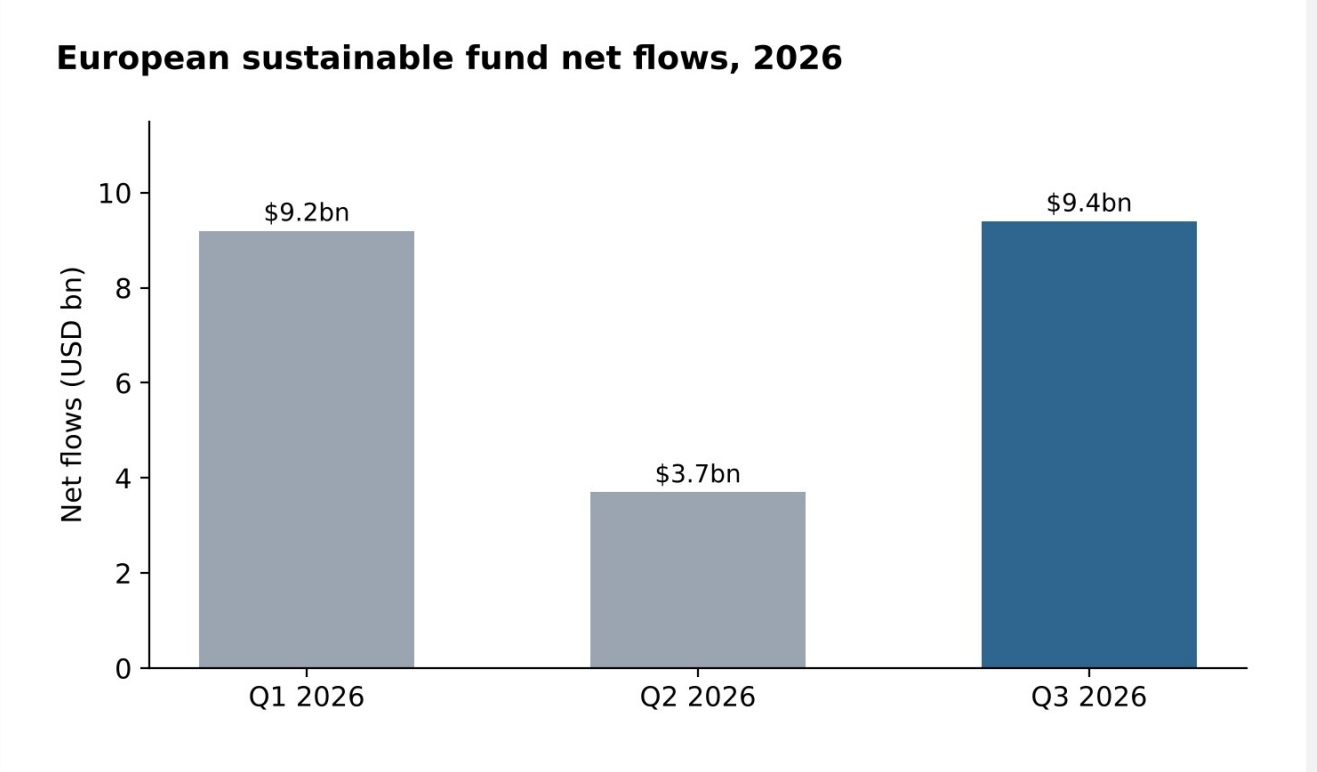
Sustainability funds see inflows

European sustainable funds took in $9.4bn in Q3 2026, after $9.2bn in Q1 and $3.7bn (revised) in Q2.

Globally, sustainable funds attracted an estimated $6.5bn (excluding China).

EU is a market leader

- **Inflows in Europe outweighed renewed outflows in the US**
- Q3 was the strongest quarter of 2026 so far
- The Q1 figure is as first published and may since have been restated



Source: Morningstar, Global Sustainable Fund Flows Q1 2026 and Q3 2026 (as reported by IREI, 5 Nov 2026).

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Fund flows since 2025

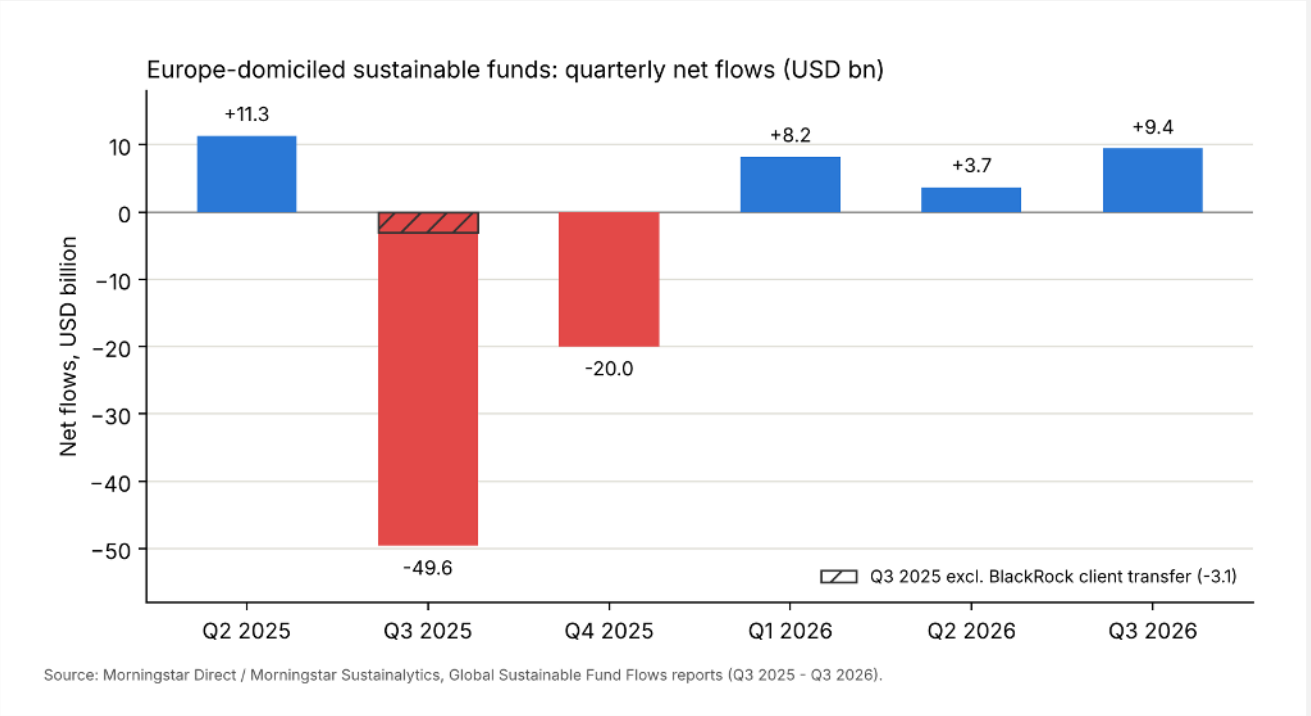
From record outflows in 2025 to three quarters of inflows

Omnibus & regulatory change effect

Quarterly net flows into Europe-domiciled sustainable funds, Q2 2025 to Q3 2026, using the latest restated figures: +$11.3bn, −$49.6bn, −$20.0bn, then +$8.2bn, +$3.7bn and +$9.4bn.

Passive investment seeks transition category

- 2025 saw −$62bn of net outflows – Europe's first annual outflow since tracking began in 2018
- Q3 2025's record outflow was largely one pension client leaving four BlackRock funds (−$3.1bn excluding it)
- 2026 recovery (~+$21bn in Q1–Q3) is driven by passive and fixed-income funds



Source: Morningstar Direct / Morningstar Sustainalytics, Global Sustainable Fund Flows reports (Q3 2025, Q4 2025, Q2 2026); Q3 2026 via IREI. Data as of 9 Nov 2026.

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Capex by country

The destination of sustainable investment is largely country-dependent

Private infrastructure in focus

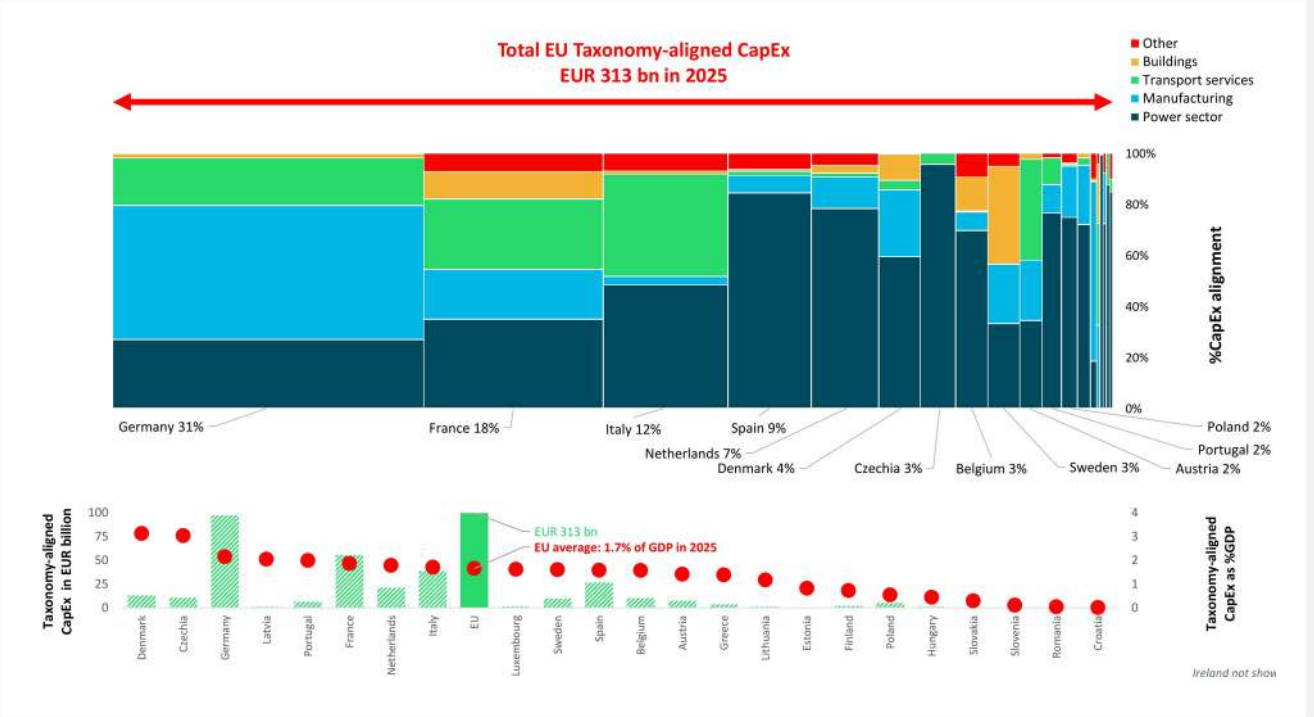
Of €313bn of EU Taxonomy-aligned capex in 2025:

- **Germany accounts for 31%,**
- France 18%,
- Italy 12% and
- Spain 9%.

The sector mix differs widely – power dominates in Spain and the Nordics, manufacturing in Germany.

Capex shows the future direction

- EU average: aligned capex worth 1.7% of GDP in 2025
- Denmark and Czechia lead relative to GDP
- **Breakdown reflects where reporting companies are domiciled, not where assets are built**



Source: EU Platform on Sustainable Finance (Oct 2026), Monitoring of Capital Flows to Sustainable Investments, p. 14. Data: own calculations based on Morningstar.

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Revenues vs capex

Where sustainable revenues stand, and where capital is moving

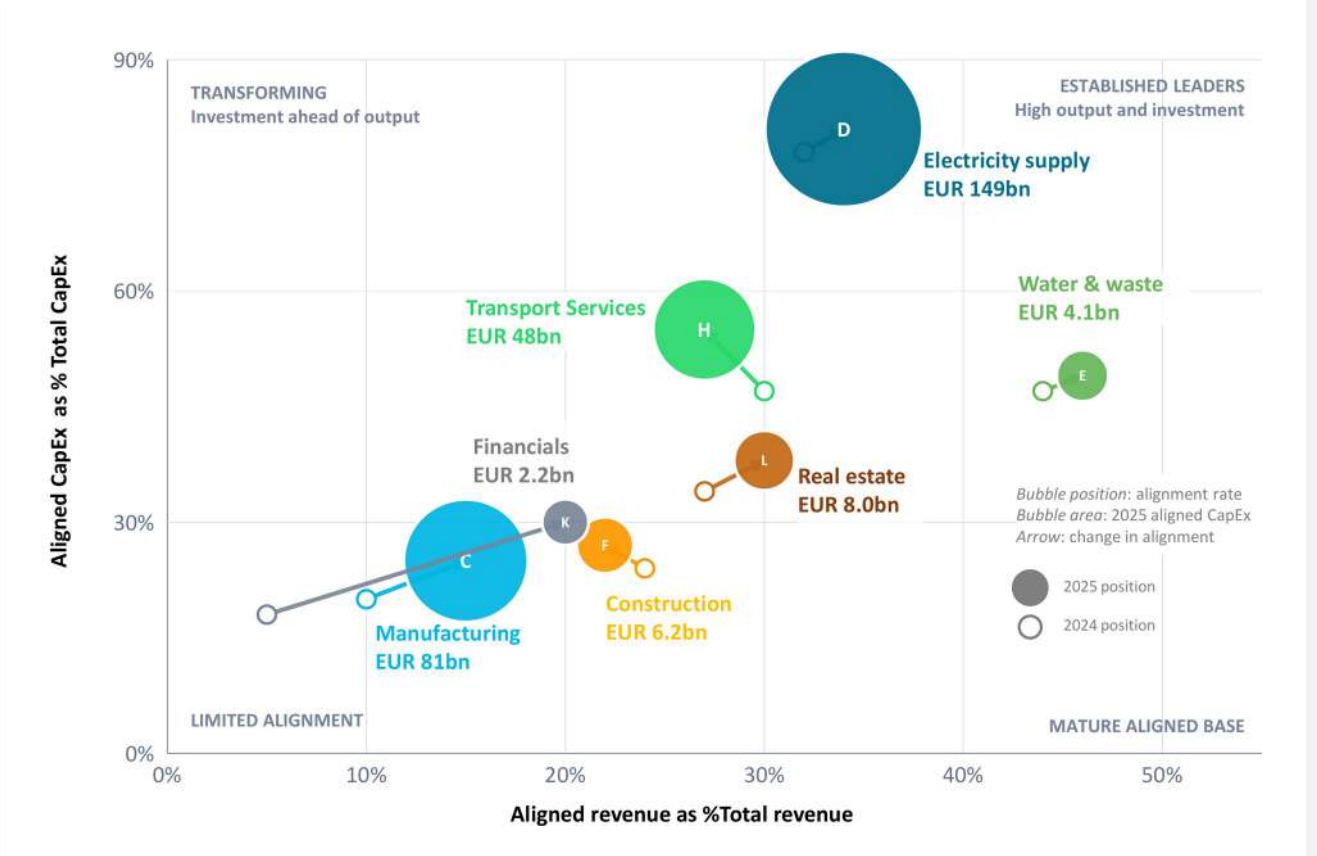
Private infrastructure in focus

Each bubble plots a sector's aligned revenue share (x) against its aligned capex share (y).

Size is 2025 aligned capex. **Electricity supply (€149bn) is the established leader**; manufacturing (€81bn) invests well ahead of its green output.

Private infrastructure in focus

- Most sectors increased both aligned capex and aligned revenue shares in 2025
- Manufacturing, real estate, water & waste and electricity improved on both measures
- **Green activities can become a sizeable part of companies' profitability**



Source: EU Platform on Sustainable Finance (Oct 2026), Monitoring of Capital Flows to Sustainable Investments, p. 20. Data: own calculations based on Morningstar.

ECB climate priorities

Supervisory priorities 2026–28: climate and nature-related risks

ECB & SSM building more granular risk monitoring

ECB Banking Supervision lists prudent management of climate and nature-related risks as a prioritised vulnerability for 2026–28.

Banks should assess and manage short-, medium- and long-term risks from the climate and nature crises and remedy remaining shortcomings.

- Supervision has moved from expectations to enforcement – penalties on ABANCA (Oct 2025) and Crédit Agricole (Feb 2026)
- Prudential transition plans are required under CRD 6 and the EBA ESG risk guidelines from January 2026
- For lenders: climate and nature risks will be tested in credit underwriting, collateral and capital processes

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Three supervisory workstreams, 2026–28

01

Follow-up on 2022 findings

Targeted follow-up and monitoring of banks' remediation of remaining shortcomings from the 2022 climate stress test and thematic review.

02

Transition planning review

Thematic review of banks' prudential transition plans under CRD 6, taking a gradual and targeted approach. Credible, board-owned plans expected.

03

Targeted on-site inspections

On-site inspections, with climate and nature expectations embedded across credit and capital processes. Findings feed into SREP.

The ECB's escalation path



2020	2022	2025–26	2026–28
ECB Guide on C&E risks	Stress test & thematic review	Periodic penalty payments	Transition plans & inspections

Source: ECB Banking Supervision, Supervisory priorities 2026–28 (Nov 2025); PwC Legal, ECB-SSM Annual Work Programme 2026; ECB press releases.

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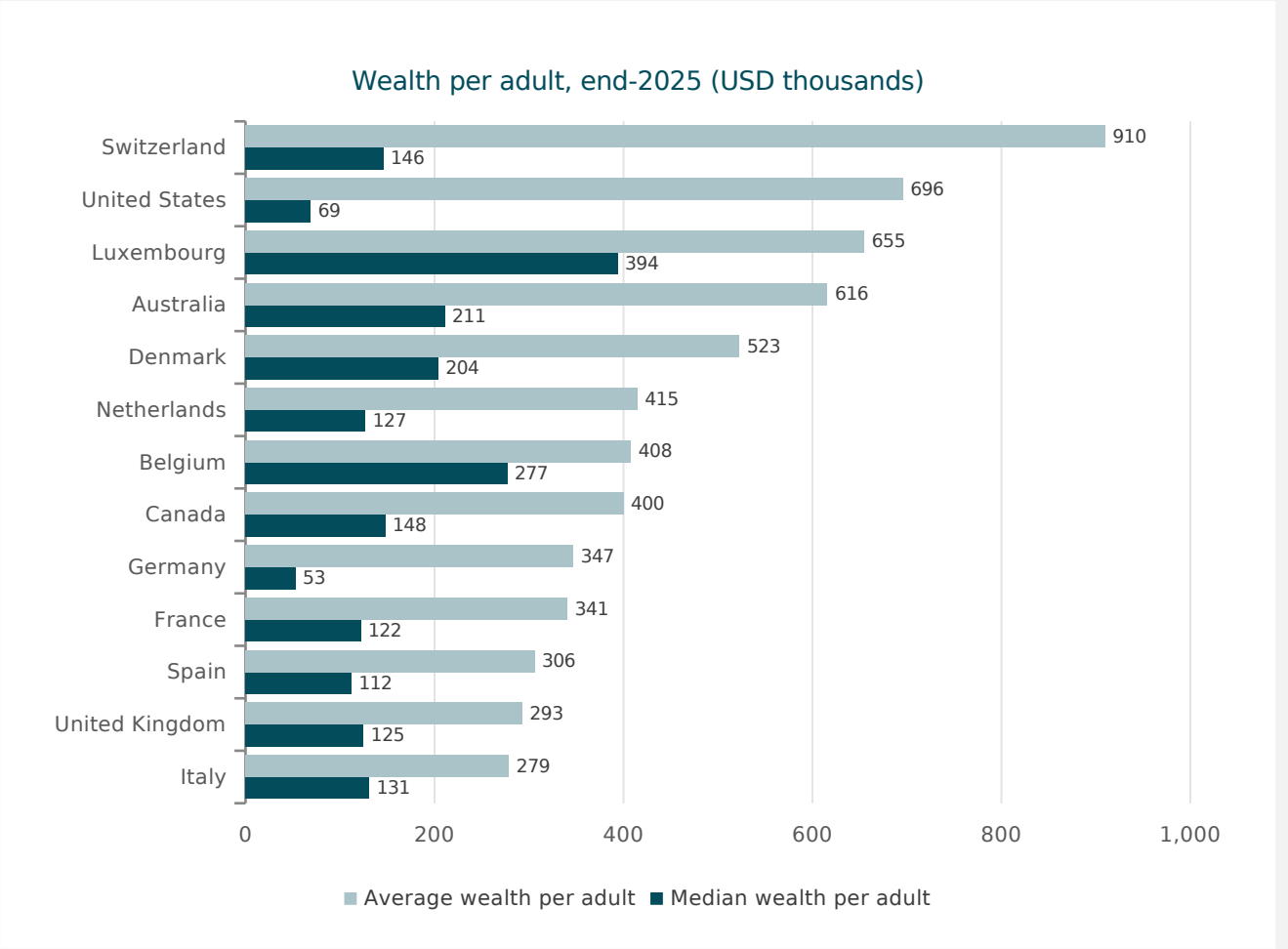
Wealth per adult

By median wealth, many Europeans are better off than Americans

Europe is better off than we think

Average and median wealth per adult at end-2025.

The US ranks 2nd on average wealth ($696k) but 28th on median wealth ($69k) – below every European market shown except Germany.



Source: UBS Global Wealth Report 2026 (June 2026), Table 1: wealth per adult in USD, end-2025.

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Leverage vs China

The EU and Japan supply most of China's imports of key industrial goods

Europe & Japan

EU (blue) and Japanese (orange) shares of China's imports for 17 products, from particle-board presses to CNC grinding machines.
For most lines, the two together supply close to all of China's imports.

Acting together turns these dependencies into a credible geoeconomic deterrent

- The EU alone dominates several lines, e.g. board presses, large steam turbines, looms and insulin
- Japan fills the gaps where the EU is weaker, e.g. industrial robots, steel casing, CNC machinery

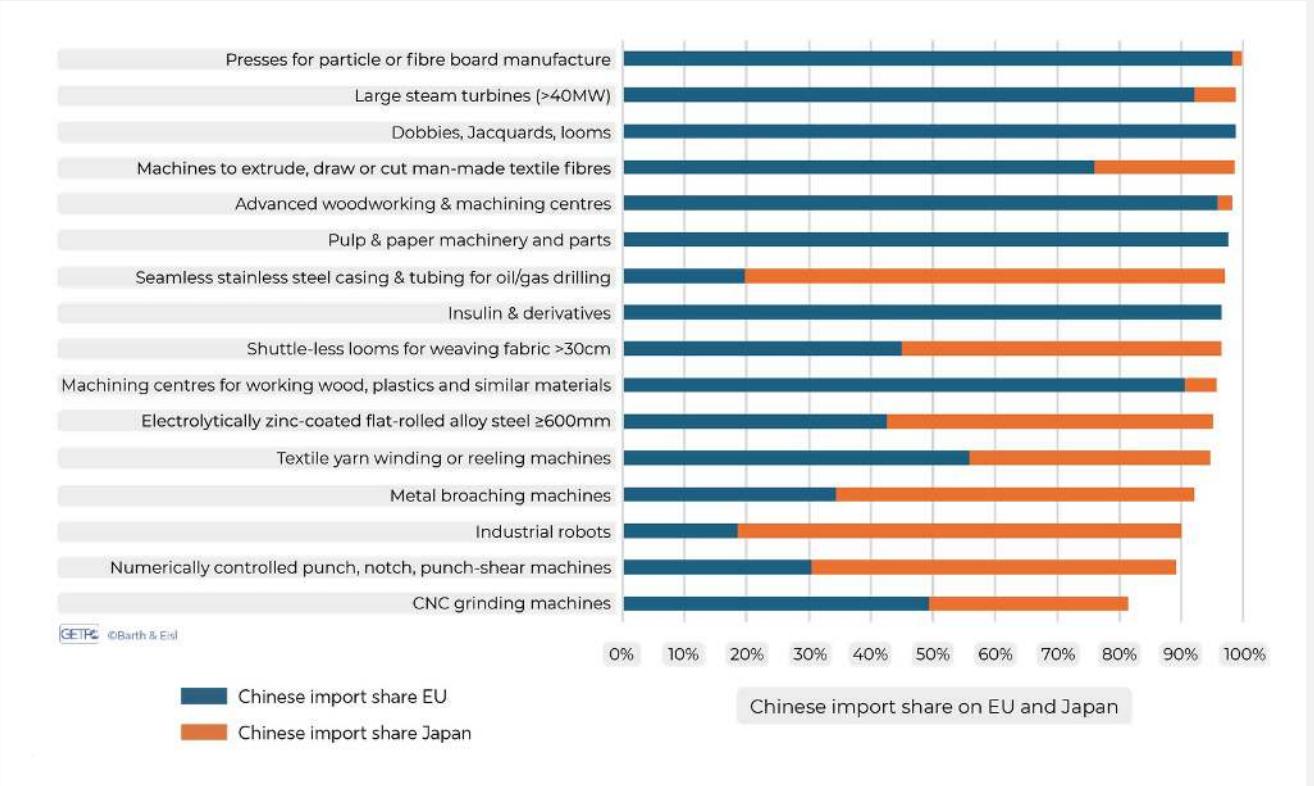


Illustration: Geostrategic Europe Task Force, based on BACI 2021–2023.

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Leverage vs the US

The US also relies on EU and Japanese suppliers for critical inputs

Europe & Canada

EU (blue) and Japanese (orange) shares of US imports for 15 products, spanning pharmaceutical inputs, medical equipment, specialty chemicals and batteries. Combined shares reach roughly 75–100%.

The EU holds leverage towards the US – strongest when coordinated with Japan

- The EU is the near-sole supplier of e.g. ergotamine, protein hormones and pseudoephedrine
- Japan dominates nickel-metal hydride and silver-oxide batteries and resorcinol

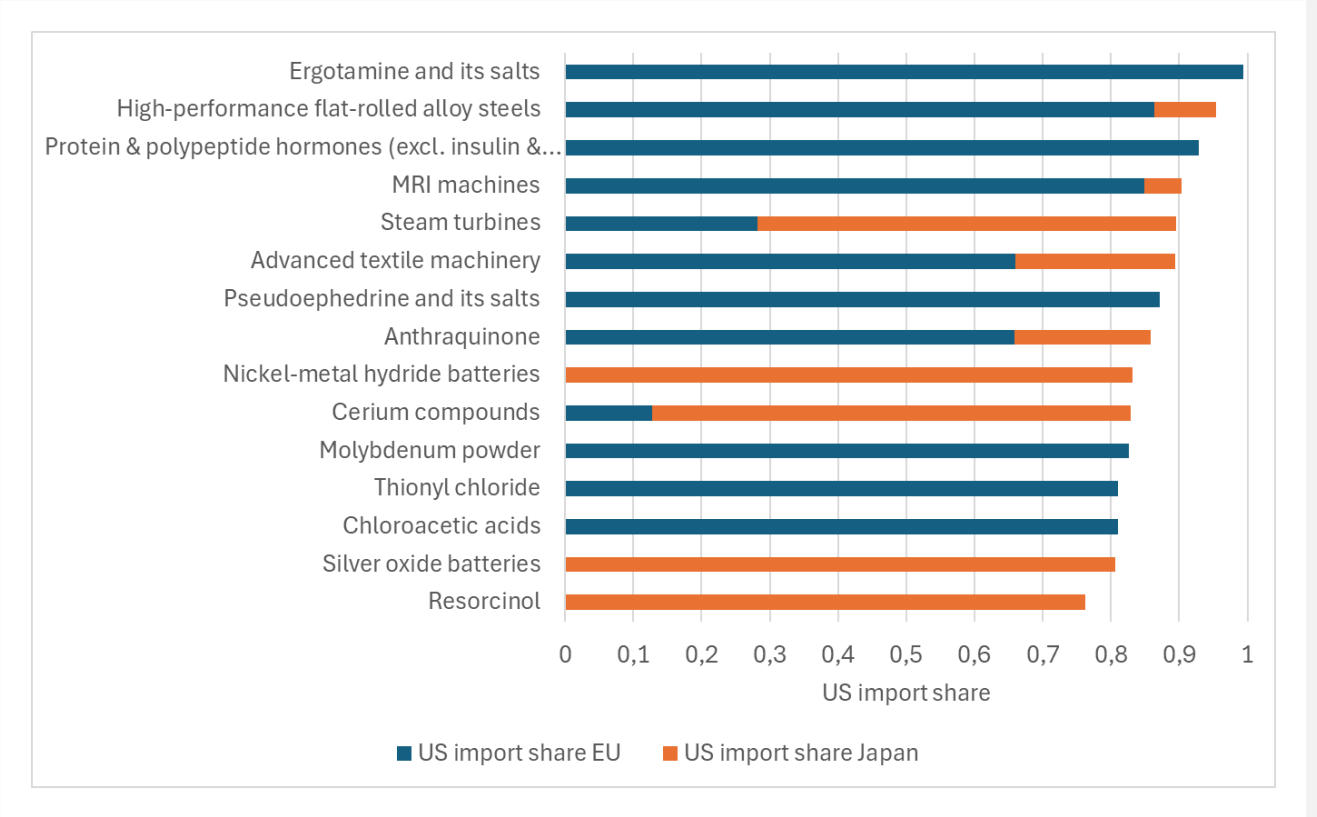


Illustration: Geostrategic Europe Task Force, based on BACI 2021–2023.

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Four Ds to partner

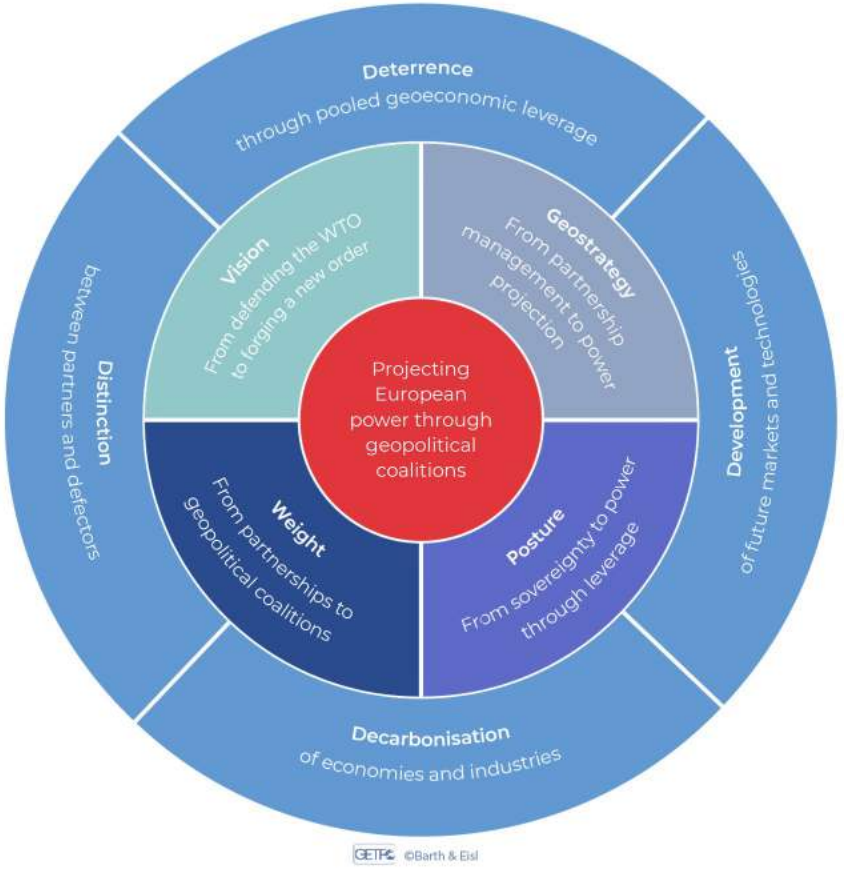
Europe's offer to the world: power through geopolitical coalitions

Framing of the solution

A framework for how Europe can project power through coalitions rather than act alone. Four outer pillars – Deterrence, Distinction, Development and Decarbonisation – frame what Europe offers partners.

A way how to combine multilateralism with economic growth & new markets

- Deterrence through pooled geoeconomic leverage; Distinction between partners and defectors
- **Development of future markets and technologies; Decarbonisation of economies and industries**
- Underlying shift: from defending the WTO to opting for a new order



Source: Geostrategic Europe Task Force, J. Barth & Eisl.

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Pooling deterrence

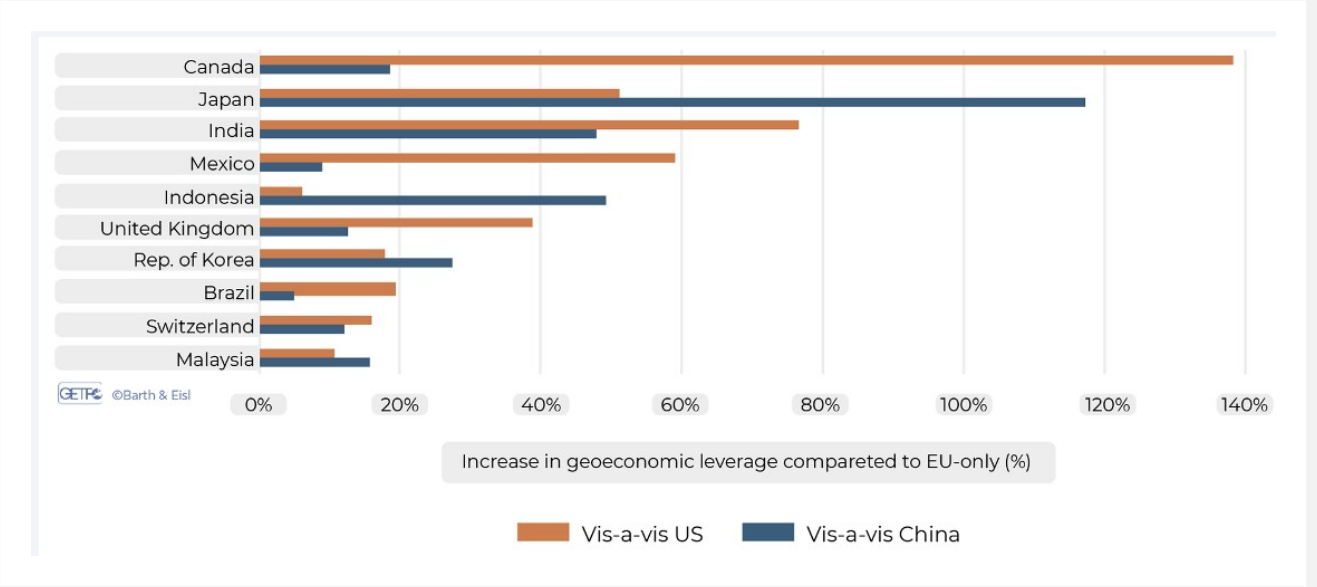
Pooling with Canada and Japan fundamentally rebalances power

What happens when middle powers cooperate

Increase in the EU's geoeconomic leverage when it pools with each partner, compared with acting alone – vis-à-vis the US (orange) and China (blue).

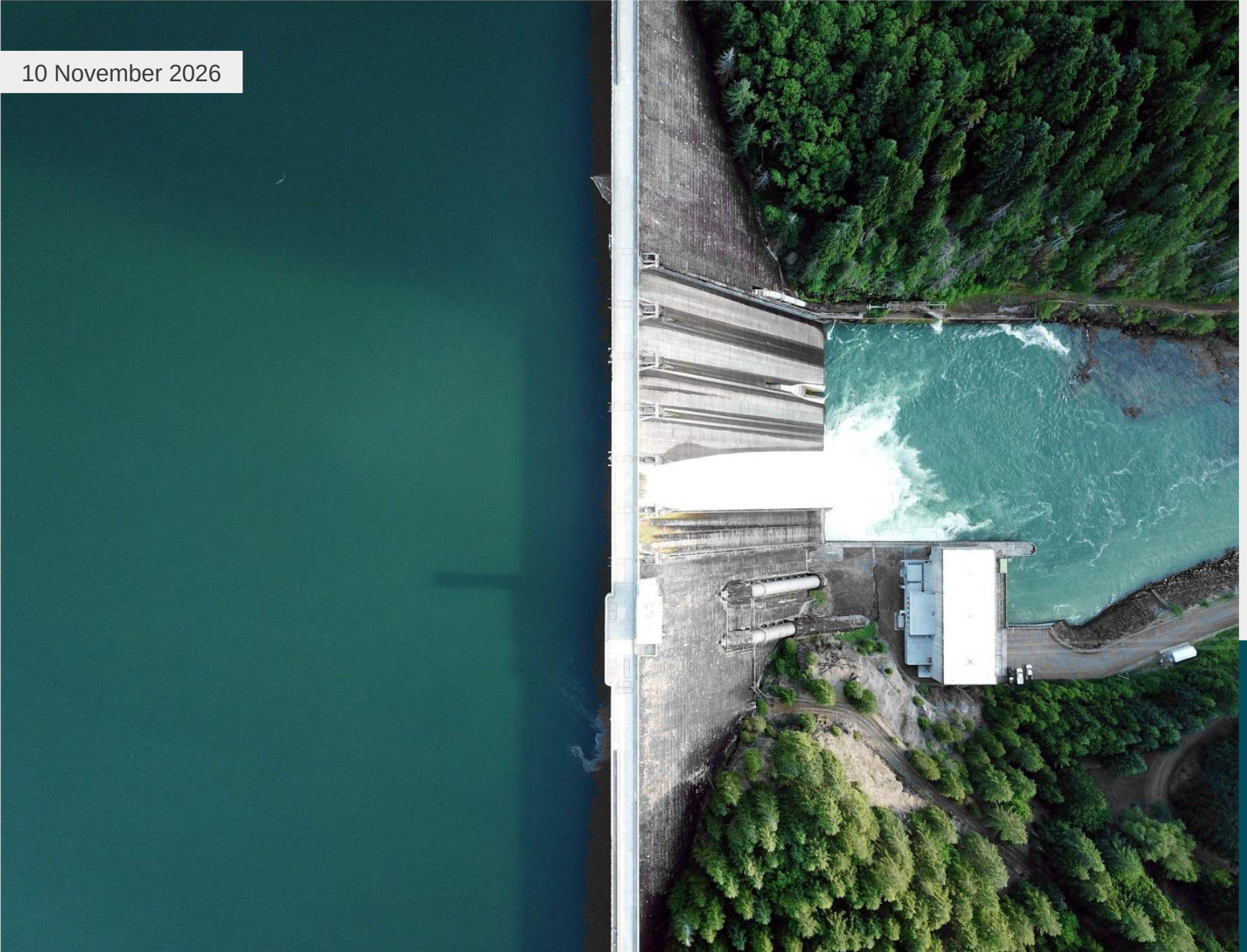
Canada, Japan and then other options

- **Canada more than doubles EU leverage towards the US (around +140%)**
- **Japan adds the most towards China (around +120%)** and strengthens the hand towards the US
- India, Mexico, Indonesia and the UK add meaningful leverage in one direction or the other



Source: Geostrategic Europe Task Force, J. Barth & Eisl.

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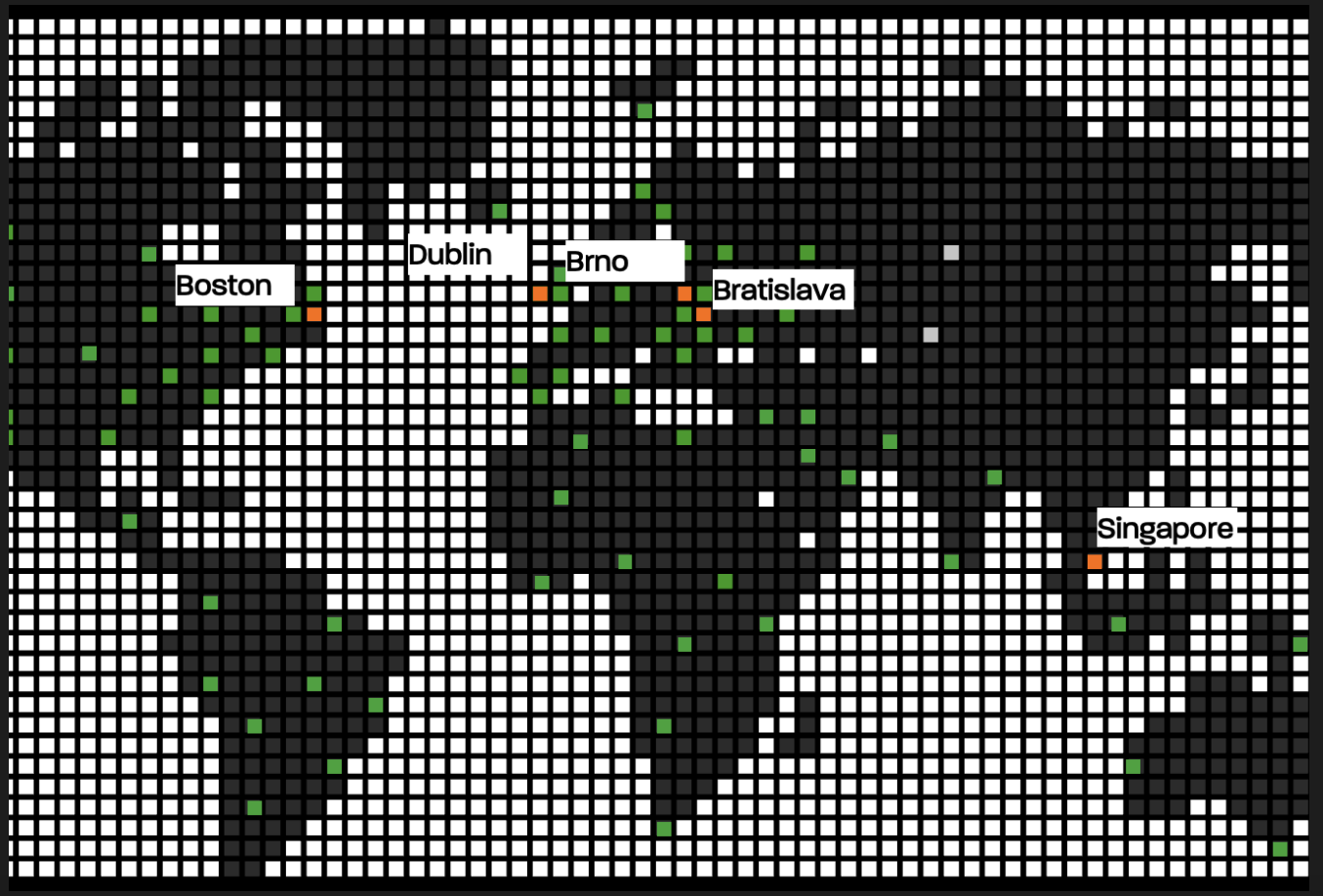
THANK YOU!

Section 1 - Circularity and resource security

Powering circular economy via technologies

((SENSONEO))





MADRID

PRAHA PRAGUE PRAGA PRAG

Buenos Aires Ciudad

City of Reykjavík

amazon

JOHN DEERE

SCHAEFFLER

VEOLIA

QATAR

Recycling Pfand Österreich

Re-turn

SPRÁVCA ZÁLOHOVÉHO SYSTÉMU

BCRS
Beverage Container Refund Scheme

RetuRO

REpont

PSK Polski System Kaucyjny

SDR PORTUGAL

Inefficiency


(Semi-) underground bins


Street/park bins


Manholes, wells, septic tanks

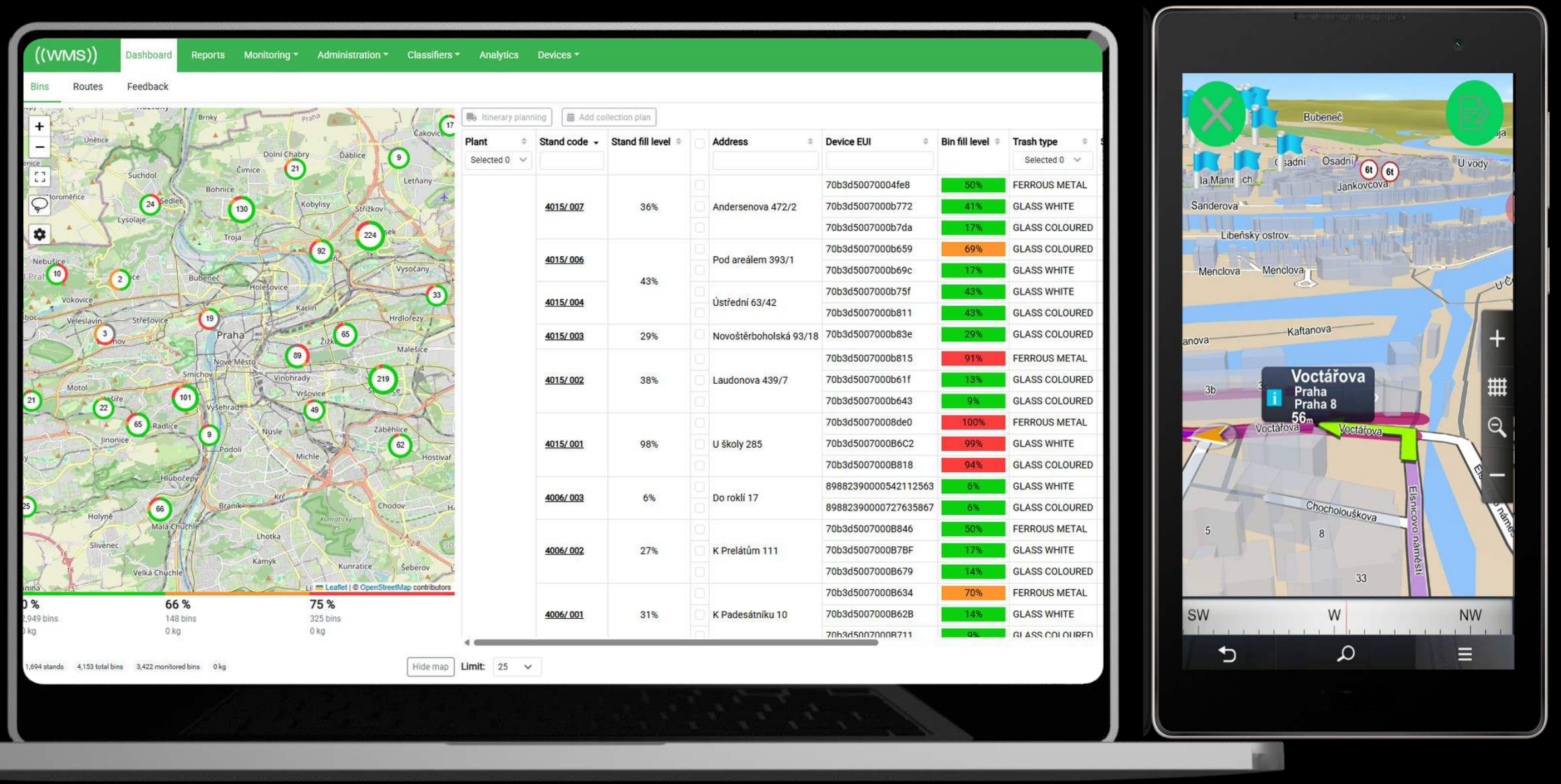

Glass bins with hydraulic arm collection


Inefficiency

1100-liter bins for plastic, paper, or general waste



Used oil bins, kerosene tanks


((WMS))
Dashboard
Reports
Monitoring
Administration
Classifiers
Analytics
Devices
Bins
Routes
Feedback
Itinerary planning
Add collection plan
Plant
Stand code
Stand fill level
Address
Device EUI
Bin fill level
Trash type
Selected 0
4015/ 007
36%
Andersenova 472/2
70b3d50070004fe8
50%
FERROUS METAL
70b3d5007000b772
41%
GLASS WHITE
70b3d5007000b7da
17%
GLASS COLOURED
4015/ 006
43%
Pod areálem 393/1
70b3d5007000b659
69%
GLASS COLOURED
70b3d5007000b69c
17%
GLASS WHITE
4015/ 004
Ústřední 63/42
70b3d5007000b75f
43%
GLASS WHITE
70b3d5007000b811
43%
GLASS COLOURED
4015/ 003
29%
Novoštěrboholská 93/18
70b3d5007000b83e
29%
GLASS COLOURED
4015/ 002
38%
Laudonova 439/7
70b3d5007000b815
91%
FERROUS METAL
70b3d5007000b61f
13%
GLASS COLOURED
70b3d5007000b643
9%
GLASS COLOURED
4015/ 001
98%
U školy 285
70b3d50070008de0
100%
FERROUS METAL
70b3d5007000B6C2
99%
GLASS WHITE
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94%
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6%
GLASS WHITE
89823900007276358 67
6%
GLASS COLOURED
4006/ 002
27%
K Prelátům 111
70b3d5007000B846
50%
FERROUS METAL
70b3d5007000B7BF
17%
GLASS WHITE
70b3d5007000B679
14%
GLASS COLOURED
4006/ 001
31%
K Padesátníku 10
70b3d5007000B634
70%
FERROUS METAL
70b3d5007000B62B
14%
GLASS WHITE
0 %
2,949 bins
0 kg
66 %
148 bins
0 kg
75 %
325 bins
0 kg
1,694 stands
4,153 total bins
3,422 monitored bins
0 kg
Hide map
Limit:
25
Leaflet | © OpenStreetMap contributors
Praha
Bubeneč
Dejvice
Vokovice
Veleslavín
Střešovice
Holešovice
Karlín
Nové Město
Smíchov
Vinohrady
Vršovice
Vyšehrad
Nusle
Michle
Podolí
Radlice
Jinonice
Hlubočepy
Branik
Holyně
Malá Chuchle
Velká Chuchle
Kunratice
Šeberov
Chodov
Hostivař
Malešice
Vysočany
Hrdlořezy
Žižkov
Libeňský ostrov
Menclova
Kaftanova
Sanderova
Jankovcova
U vody
Osadní
Voctářova
Praha
Praha 8
56m
Chocholouškova
Elsnicovo náměstí
SW
W
NW

City of Prague | 3627 sensors

Results

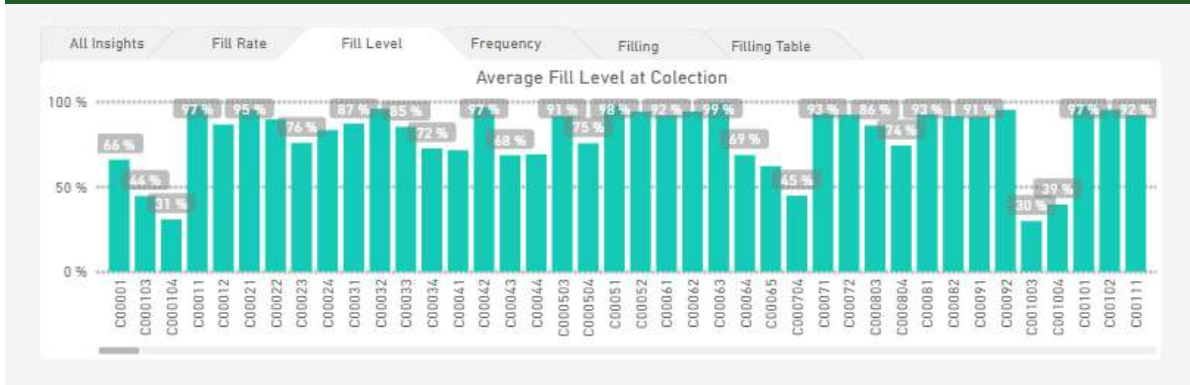
45%
average fill level in 2019

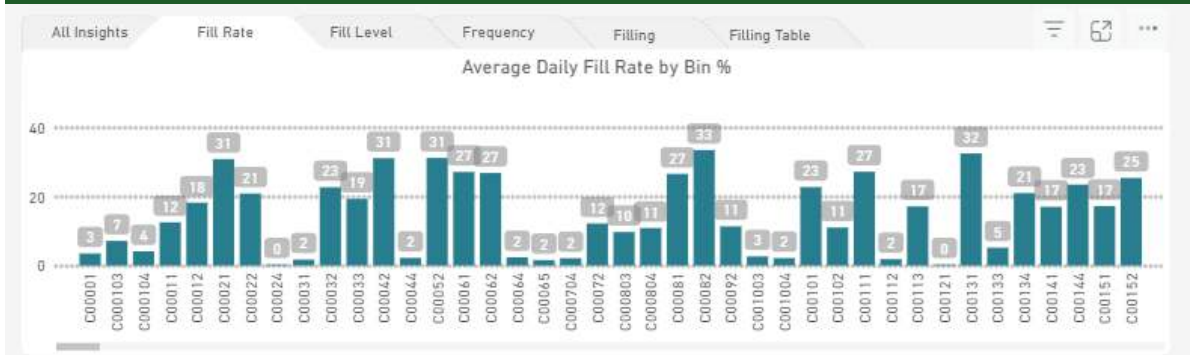
43%
time of fleet capacity use in 2019

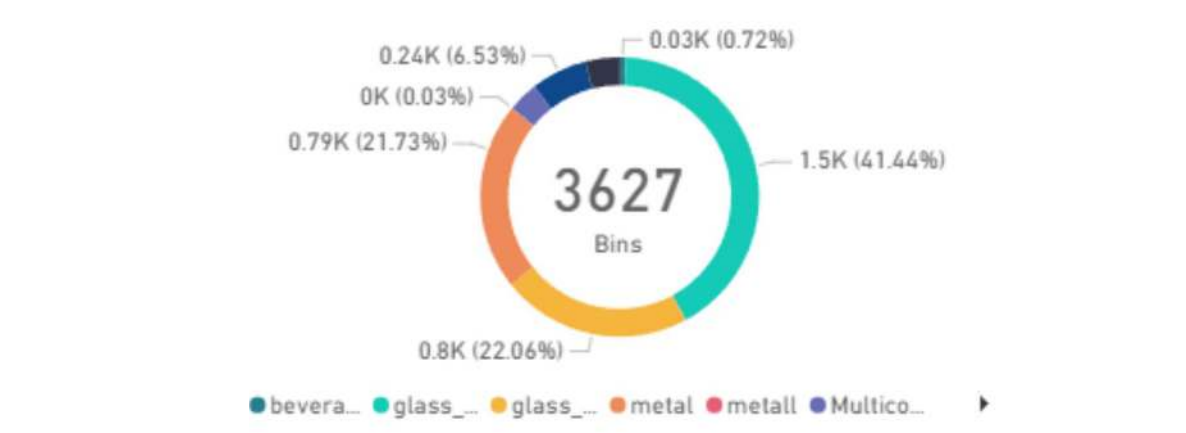
73%
average fill level in 2024

24%
cost savings

$156
estimated annual savings per 1 sensor







Textile waste collection company

Results

-22%

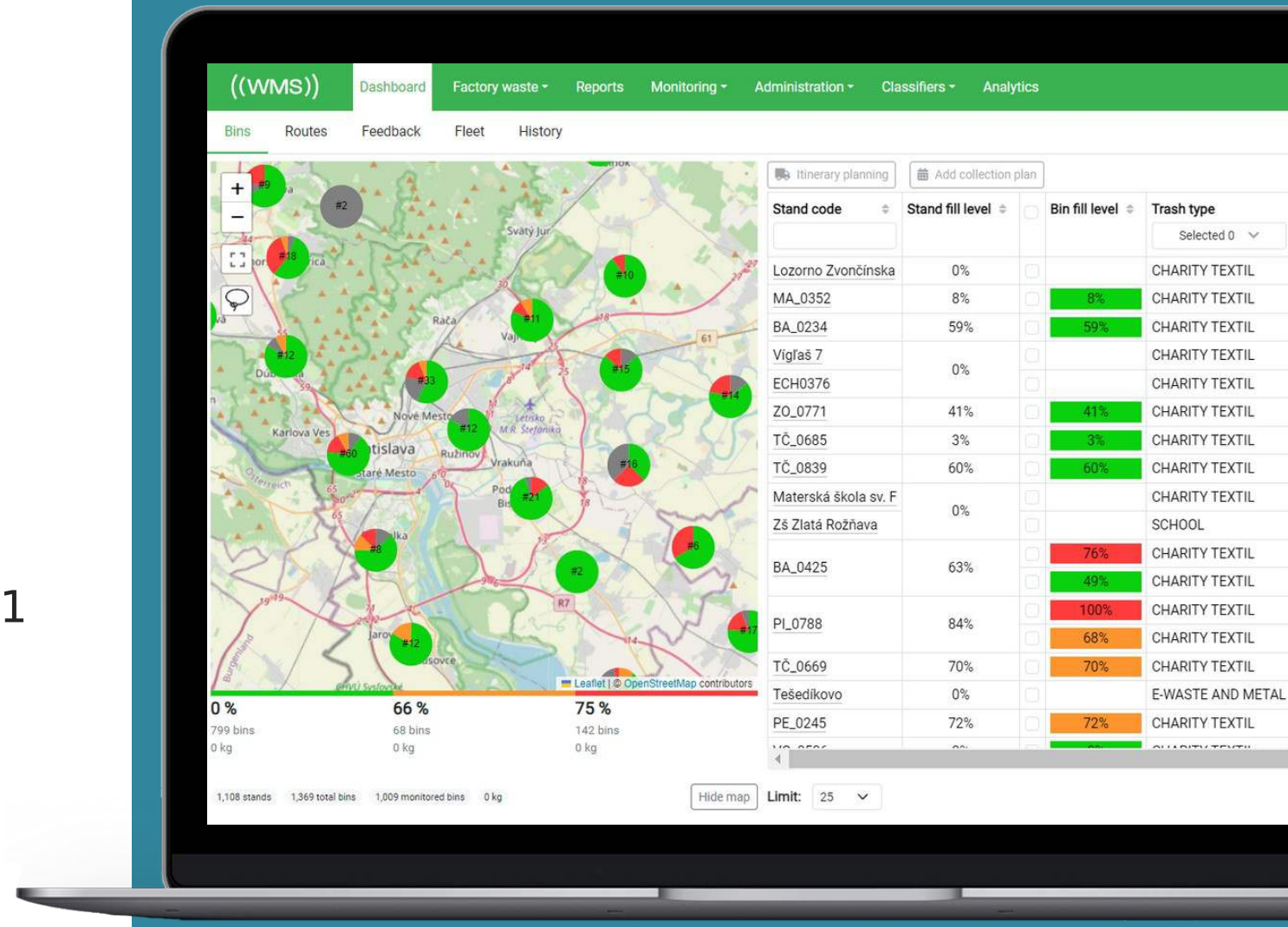
savings on waste collection cost

-29%

of time required for the collection of 1 tonne

7 months

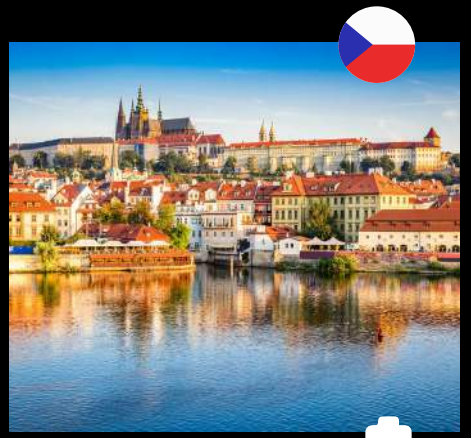
ROI

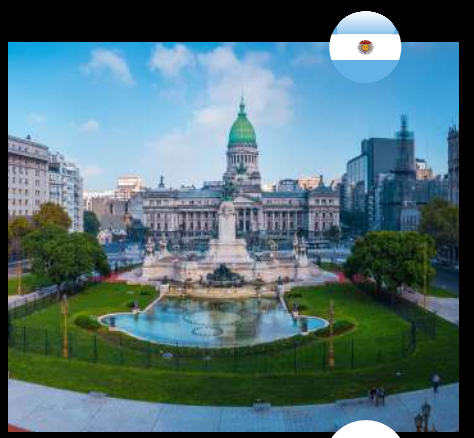


50.000+ sensors in 91 countries











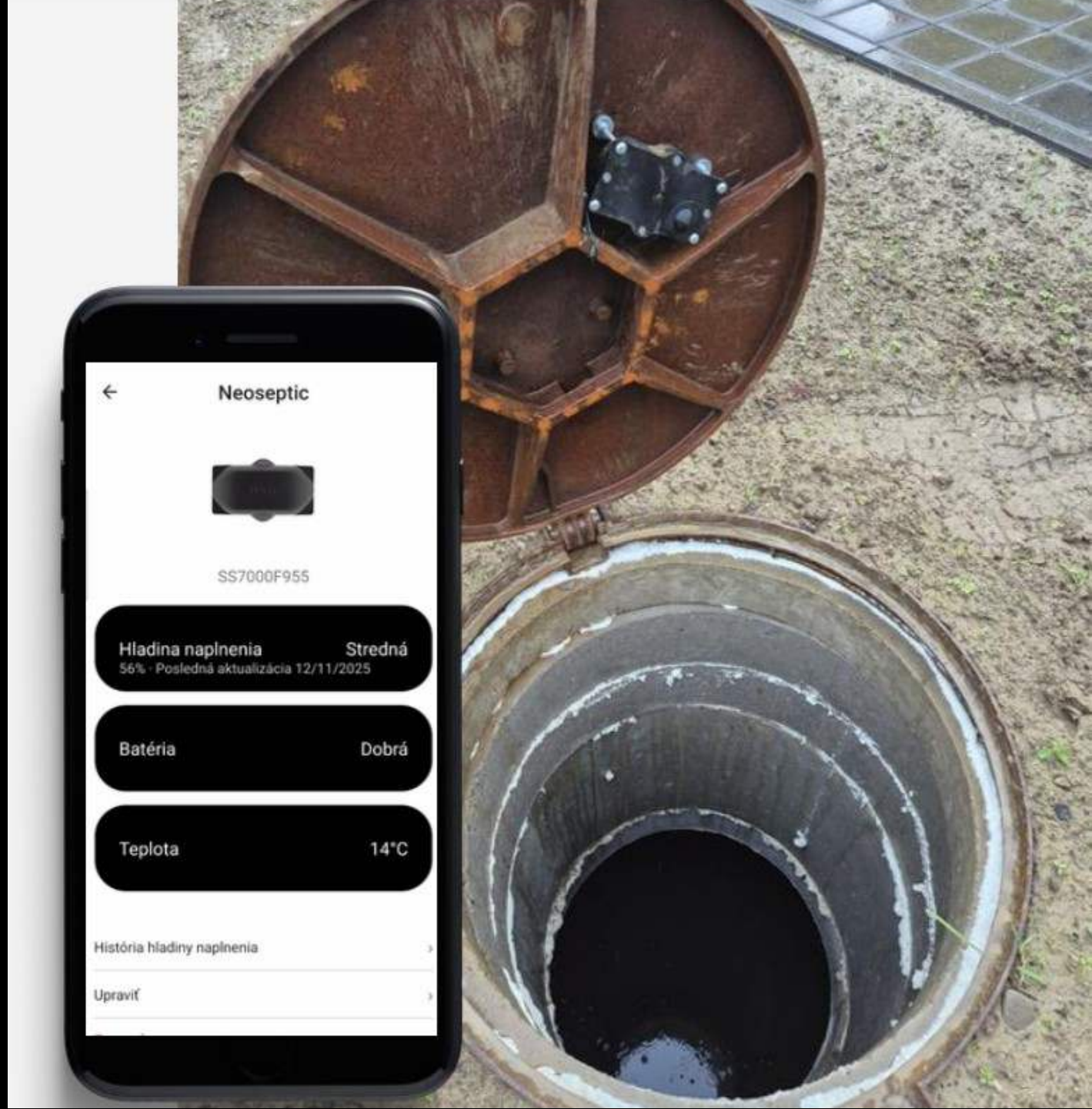


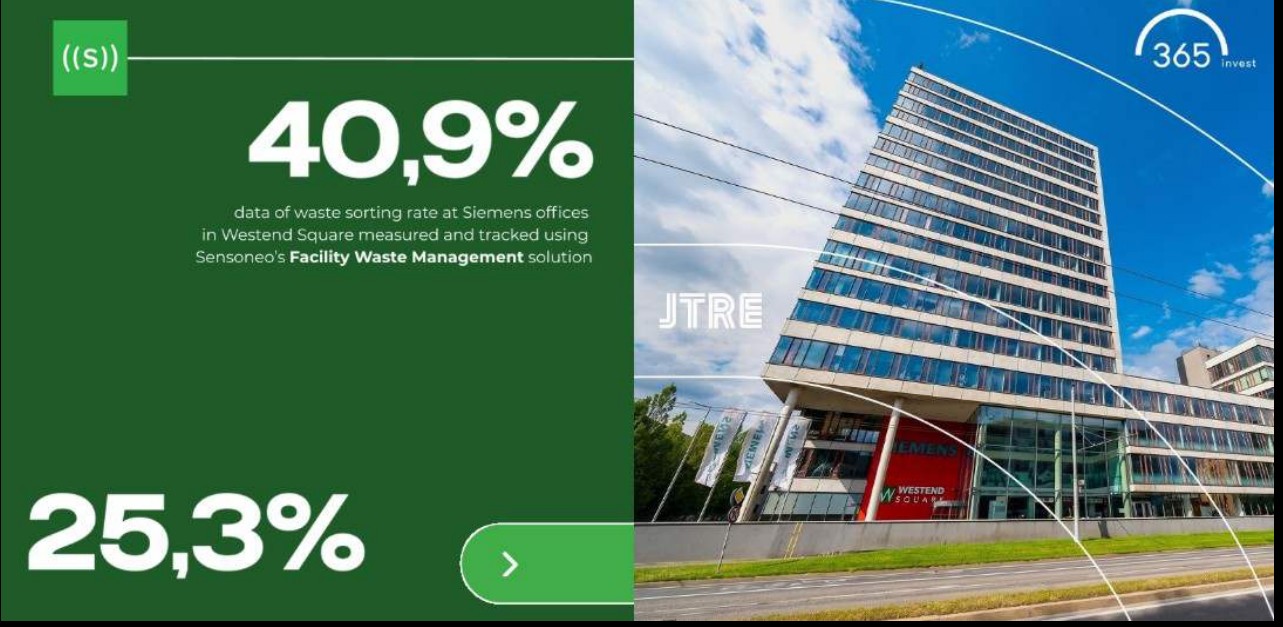




- Buenos Aires, Argentina
- Al-Ula, Saudi Arabia
- Madrid, Spain
- Prague, Czech Republic
- Reykjavík, Iceland
- Doha, Qatar
- Cambridge, UK

Smart Wastewater Holding Tank Monitoring





FACILITIES
FACTORIES
PRODUCTION PLANTS

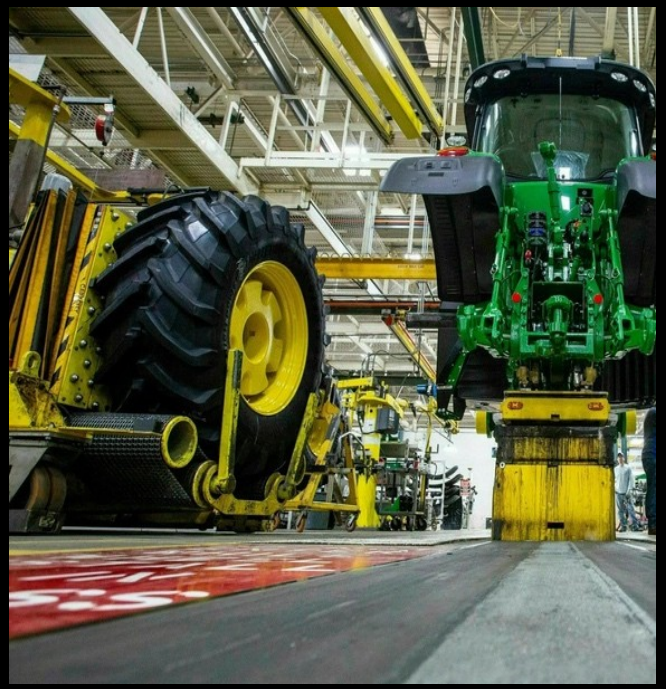
amazon

JOHN DEERE

SCHAEFFLER

NOVARTIS

VEOLIA



66,7% decrease in number of waste collections

Deposit Return Systems



90 %

9 out of 10 beverage containers can come back.

Conventional Municipal Systems



Additional Sorting, Higher Contamination & Material Losses

Deposit Return Systems



The combination of a 90% collection rate and closed-loop recycling reduces the need
for virgin raw materials and lowers emissions.

PET

Aluminium cans

Glass

Tetrapack

The state sets the rules.
Industry finances the system.
Retail enables the return.

Deposit

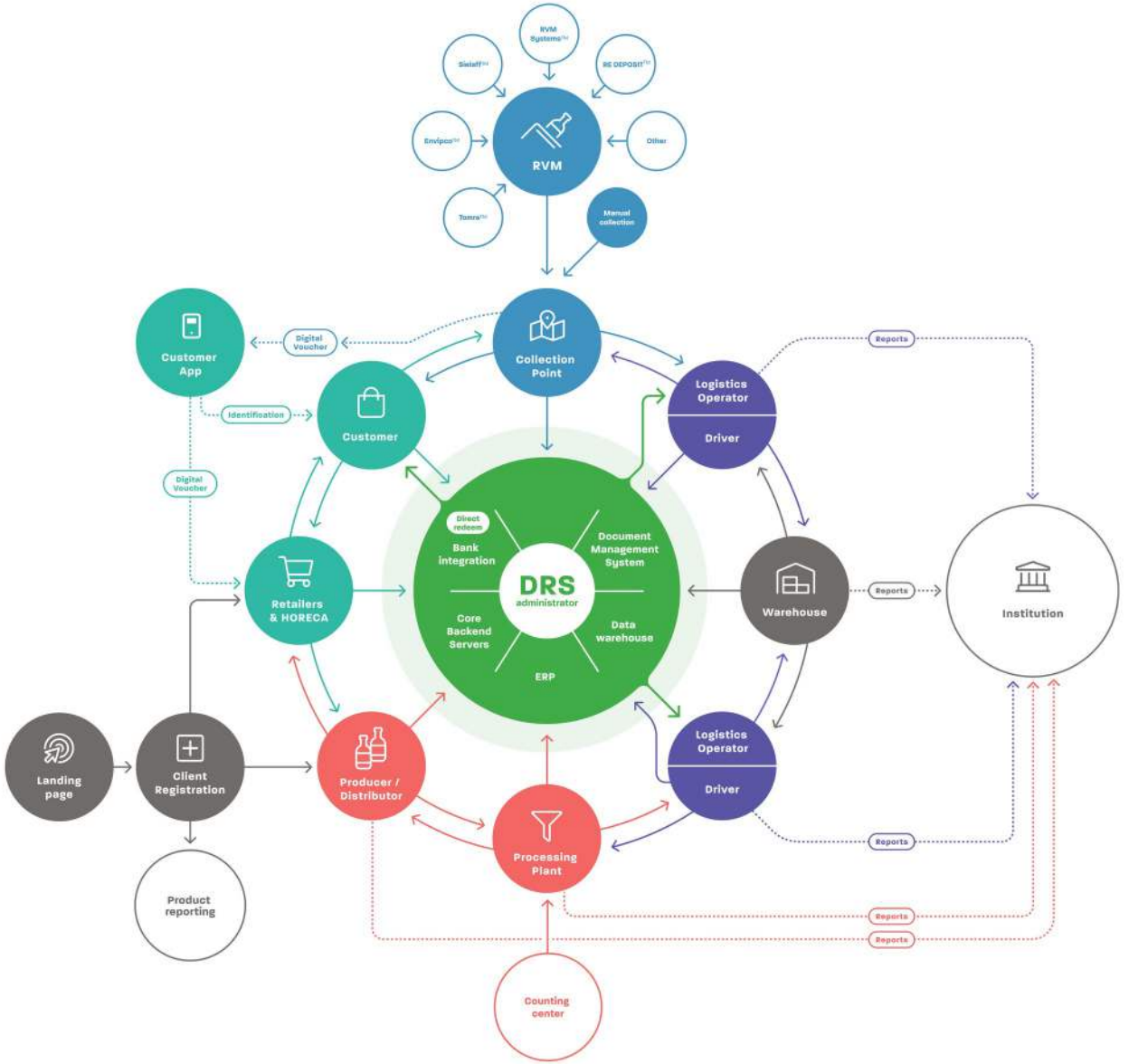
Producers

DRS Operator

Retail

Logistic & Recycling

State


RVM Systems™
Sielaff™
RE DEPOSIT™
Envipco™
Other
Tomra™
Manual collection
RVM
Customer App
Digital Voucher
Collection Point
Identification
Customer
Logistics Operator
Driver
Reports
Digital Voucher
Direct redeem
Bank integration
Document Management System
DRS
administrator
Core Backend Servers
Data warehouse
ERP
Retailers & HORECA
Warehouse
Reports
Institution
Landing page
Client Registration
Producer / Distributor
Logistics Operator
Driver
Reports
Processing Plant
Product reporting
Reports
Reports
Counting center

Deposit Return Schemes powered by Sensoneo

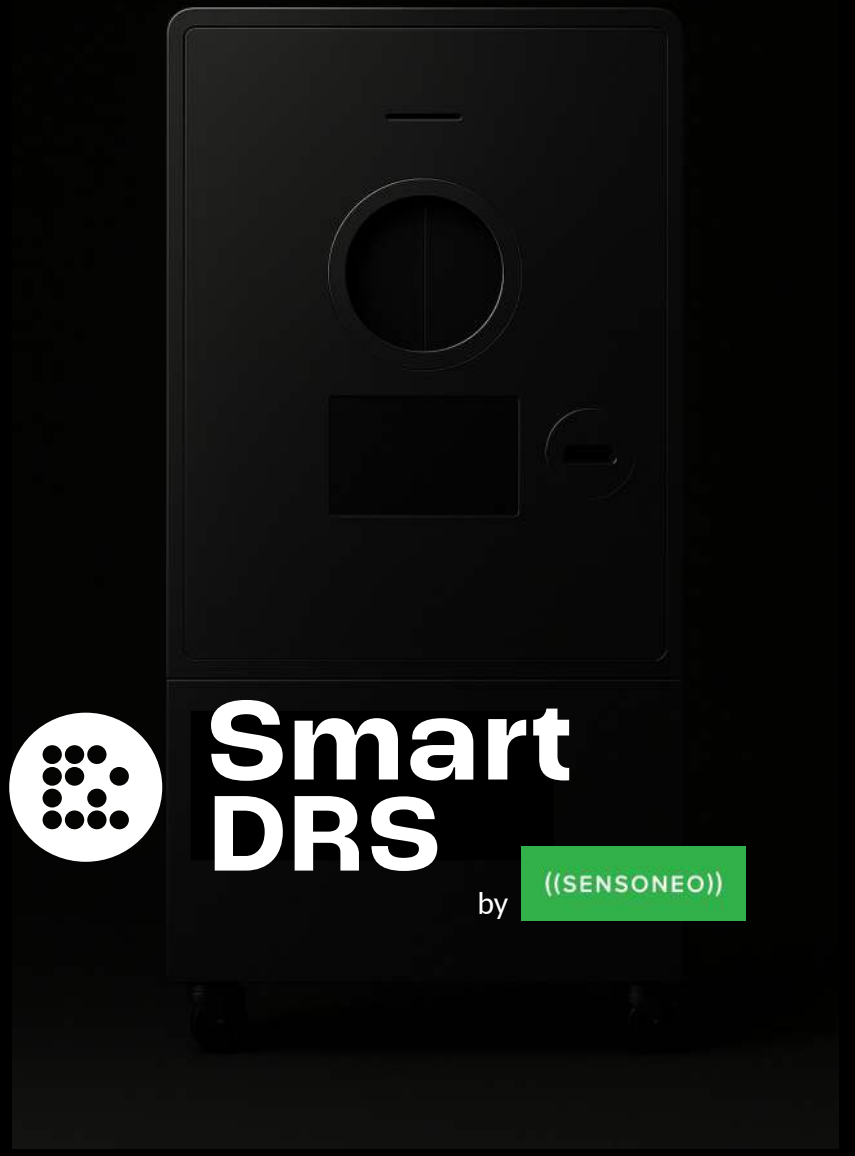


- IT Backbone of the entire scheme
- End-to-end daily operations
- High security & Fraud prevention
- Transparency, efficiency and automation

SCALABILITY

SECURITY

CONVENIENCE



Smart DRS

by ((SENSONEO))




rink
queeze
can
eturn


drink
sque




Smart
DRS


5 Items
Donate to charity
75 EUR
Send to wallet
Print voucher

Unique Container ID





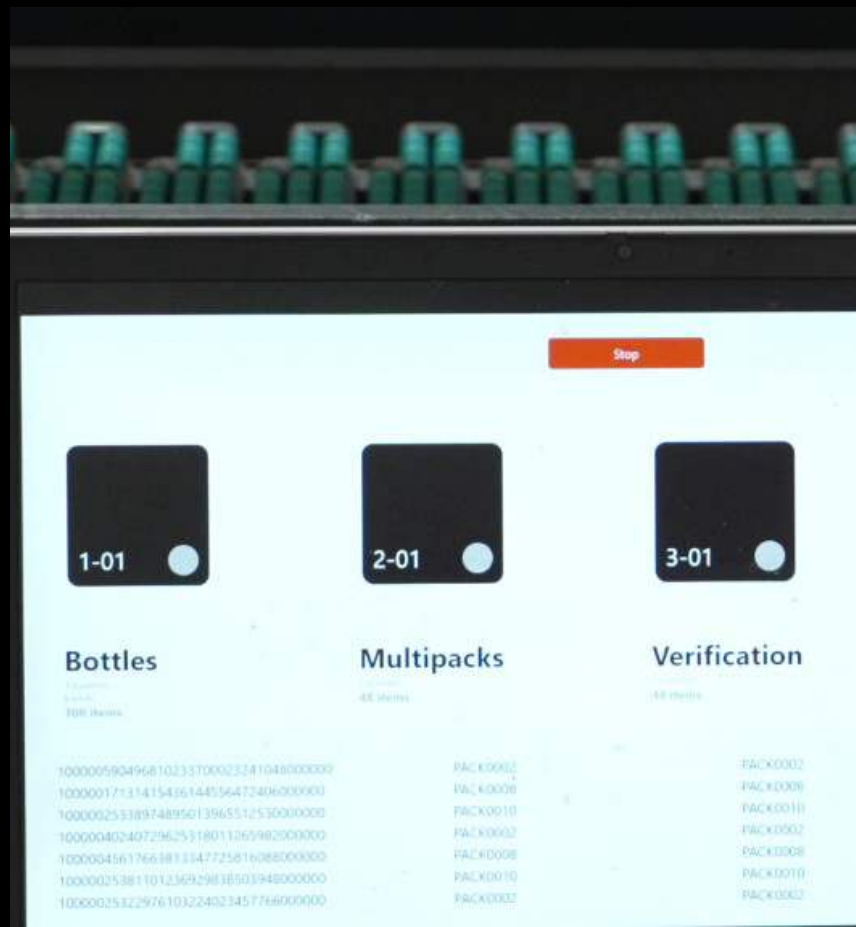


Real-life deployment of the solution

Smart Production Line







Key benefits



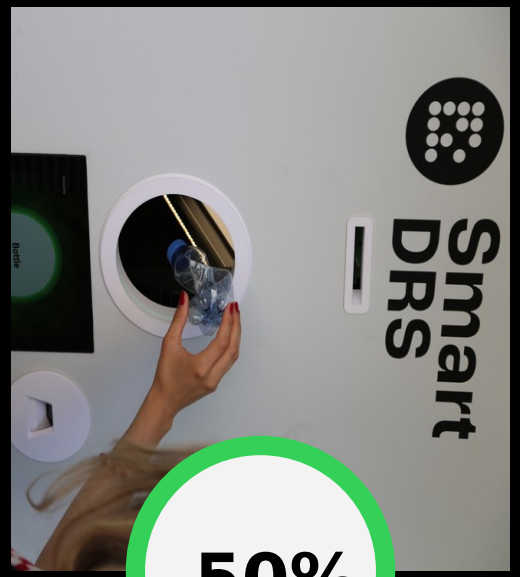
-81 %

Purchase or lease costs
Compared to RVMs



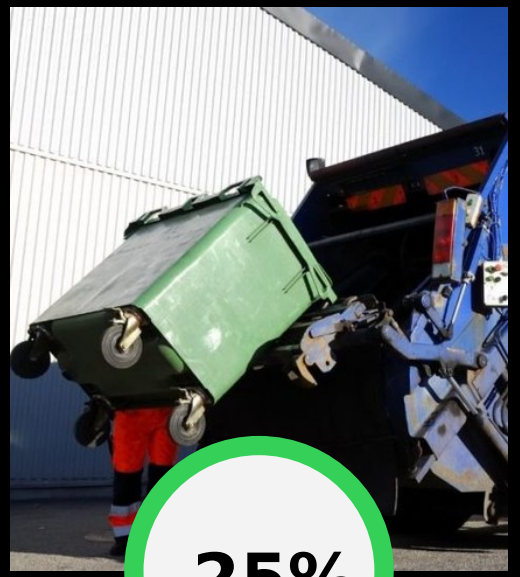
-41 %

Operational costs
Compared to RVMs



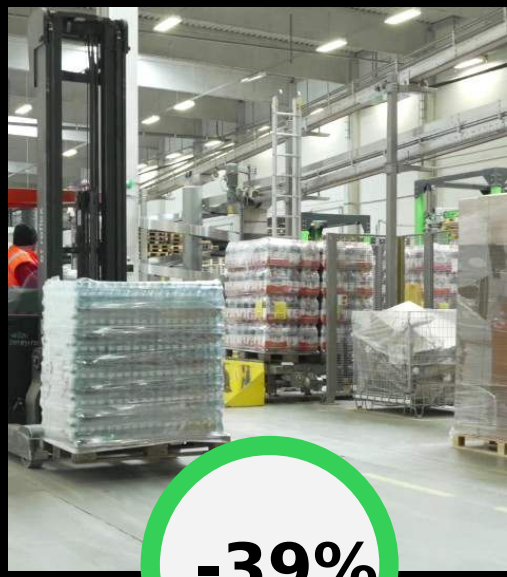
-50%

Time of the return process
Compared to RVMs



-25%

Staff workload
Compared to RVMs



-39%

Lower costs for Industry Fee
Compared to traditional DRS

No Codes

Visual recognition only







Flexible deposit payout



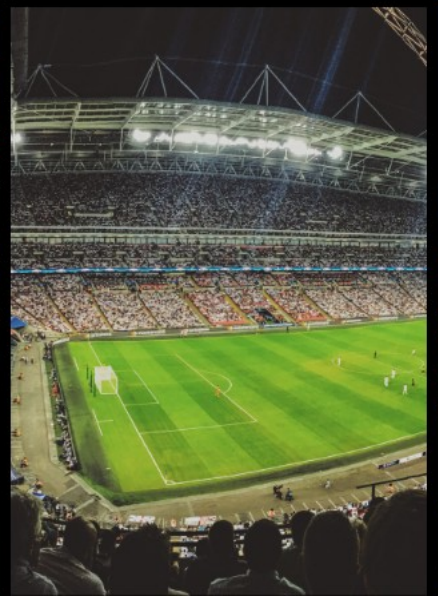




Beyond standard collection points

Beverage containers are generated and remain in locations that do not currently need to operate as standard collection points.









Reuse

Automated Reusable Cup Returns

Instant Card Refunds

- No Apps or Registration
- No Codes Scanning
- No Cash
- No Waiting

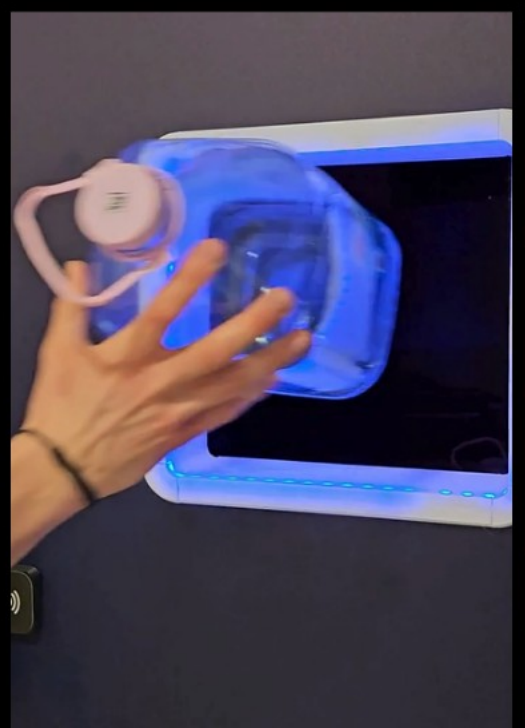


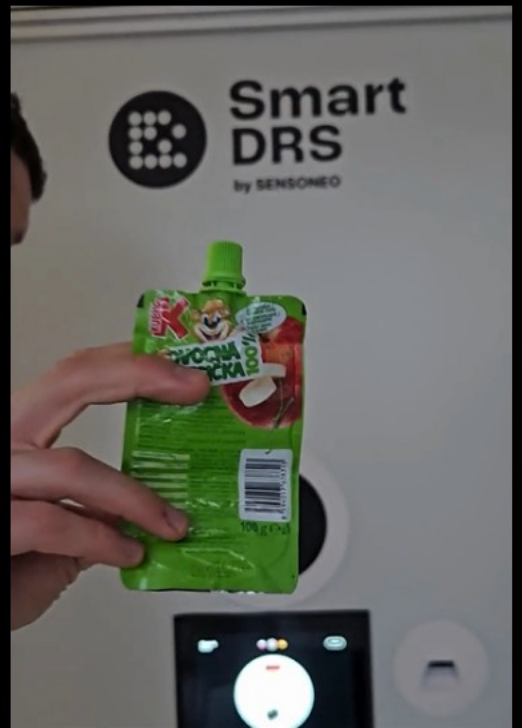
One machine, any packaging

Various types of packagings

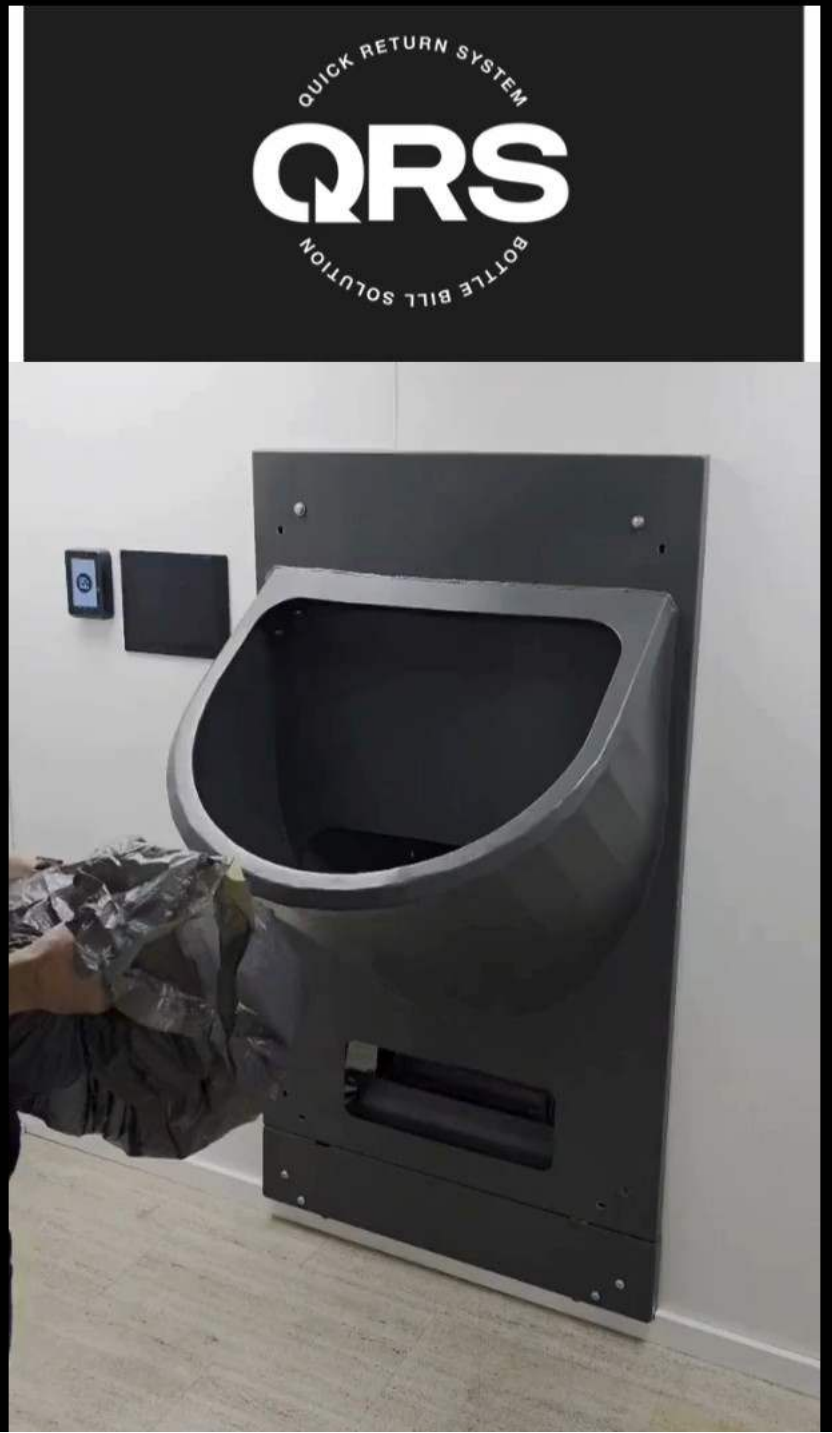




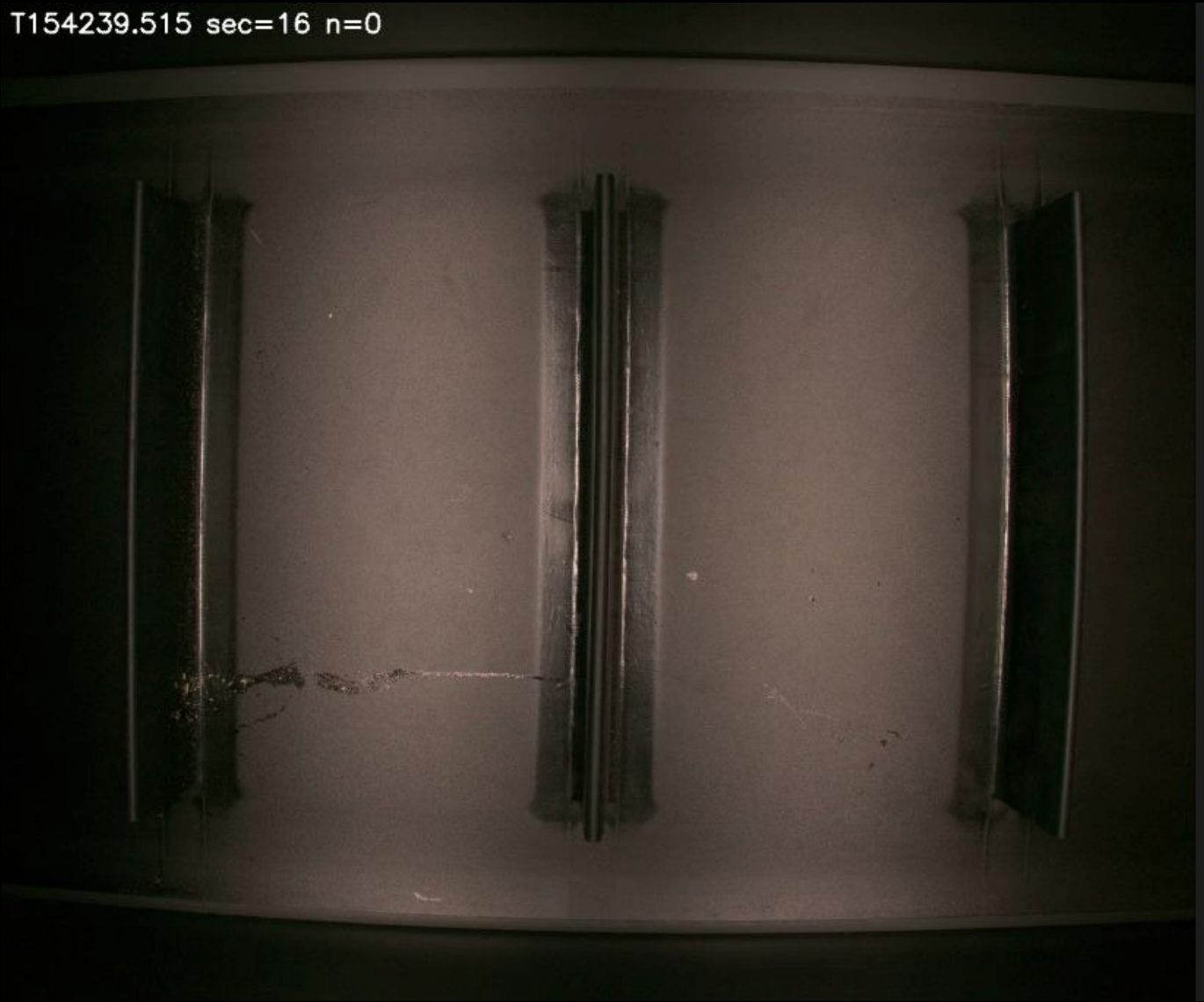







QUICK RETURN SYSTEM
QRS
BOTTLE BILL SOLUTION

AI recognition in action



Session 20260917_00022 – 29 unique objects

CAN 9 PET 20 OTHER 0 T154239.515 sec=16

in frame: 0 counted so far: 0 / 29

ID	Class	Brand	Product	conf c/b/p
1	PET	Mattoni	unknown (green bottle, blue la	0.95 0.65 0.30
2	PET	Magnesia	Red granatove jablko, jemne pe	0.95 0.75 0.70
3	CAN	Coca-Cola	Original Taste (FIFA edition)	0.95 0.90 0.70
4	CAN	unknown	black energy drink can (crushe	0.80 0.10 0.40
5	PET	Mitická	0.5L (purple bottle)	0.95 0.85 0.50
6	PET	Coca-Cola	Original Taste	0.95 0.95 0.85
7	PET	Cappy	Orange (Shake the pulp)	0.95 0.90 0.75
8	CAN	Zlaty Bazant	Radler 0,0% jahoda (strawberry	0.95 0.90 0.70
9	PET	Vinea	biela 0.5L	0.95 0.90 0.80
10	CAN	Kofola	Original	0.95 0.95 0.85
11	CAN	San Pellegrino	Melograno e Arancia	0.95 0.90 0.85
12	CAN	Coca-Cola	Original	0.95 0.95 0.80
13	CAN	Pepsi	Zero Sugar	0.95 0.95 0.90
14	PET	Klastorna	Kalcia 0.5L	0.95 0.90 0.80
15	PET	Pepsi	Original 0.5L	0.95 0.95 0.75
16	CAN	Vinea	biela (can)	0.95 0.85 0.70
17	PET	Kofola	Original 0.5L	0.95 0.60 0.50
18	PET	Klastorna	Kalcia 0.5L	0.95 0.90 0.80
19	PET	Alive	Micro synbiotic 500ml	0.95 0.85 0.70
20	PET	Targa Florio	Pomaranc (orange) 2L	0.95 0.90 0.70
21	PET	Rajec	s kyslikom (oxygenated)	0.95 0.70 0.65
22	CAN	Monster	Juiced (white/pink can)	0.95 0.75 0.40
23	PET	Rajec	unknown (blue cap)	0.95 0.50 0.30
24	PET	Coca-Cola	Zero Sugar (bez cukru)	0.95 0.90 0.60
25	PET	unknown	'Original', blue label with ye	0.95 0.15 0.30
26	PET	Fatra	mineralna voda (green bottle)	0.95 0.85 0.40
27	PET	Vinea	biela 0.5L	0.95 0.85 0.75
28	PET	Kofola	Original 2L	0.95 0.95 0.80
29	PET	unknown	dojcenska voda (infant water),	0.95 0.20 0.60


((SENSONEO))
Manage






KRIŠTAĽOVÉ KRÍDLO


Deloitte.




EY
2024

Thank you

((SENSONEO))

Section 2 - How physical and biodiversity risks translate into value creation



UNIQA SUSTAINABLE

living better together

Physical Risk Management

November 10th 2026

UNIQA SUSTAINABLE

living better together

01
UNIQA Sustainable at a glance

Olivera Böhm Rybak



Chief Corporate Business Officer International
UNIQA Group

CEO
UNIQA Sustainable



Gerhard Sirucek

Managing Director of **UNIQA Sustainable**

360° Resilience Services

RISK & RESILIENCE ADVISORY SERVICES

1 RATE

Identify climate, operational, cyber, and asset-related risk exposure.

- Risk Engineering Assessments
- Climate risk analysis
- Cyber assessments
- Portfolio exposure analysis

2 QUANTIFY

Understand potential operational and financial relevance.

- Financial Impact Analysis
- Effects on collateral and asset valuation
- Scenario analysis

3 TRADE

Define priorities for resilience, adaptation and continuity.

- Business Continuity Management
- Adaptation strategy
- Transition planning

4 IMPLEMENT

Support measures for prevention, protection, energy efficiency and decarbonisation.

- Prevention & Protection Measures
- Energy efficiency
- Decarbonization initiatives
- Improvement measures

5 REPORT

Support transparent sustainability, ESG and risk reporting.

- Sustainability Reporting (VSME)
- Regulatory & ESG reporting

DIGITAL SERVICES

BUSINESS RESILIENCE PLATFORM

The Business Resilience Platform supports structured assessments, portfolio analysis, monitoring and reporting across all five phases.

- Monitoring of climate and physical risks
- Portfolio exposure analysis
- Cyber Risk Insights
- Carbon footprint, risk dashboards & reporting

UNIQA Sustainable expands insurance expertise to include prevention, sustainability and resilience

UNIQA SUSTAINABLE

A growing platform for sustainability and resilience services

OUR VISION

UNIQA Sustainable is expanding its insurance expertise to include **prevention, sustainability and corporate resilience** to support customers in reducing risks and seizing opportunities at an early stage.

KEY FIGURES

July 2024
Foundation
HQ Vienna

64
Experts

11
Markets



UNIQA SUSTAINABLE

living better together

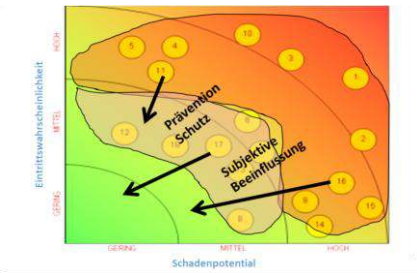
02

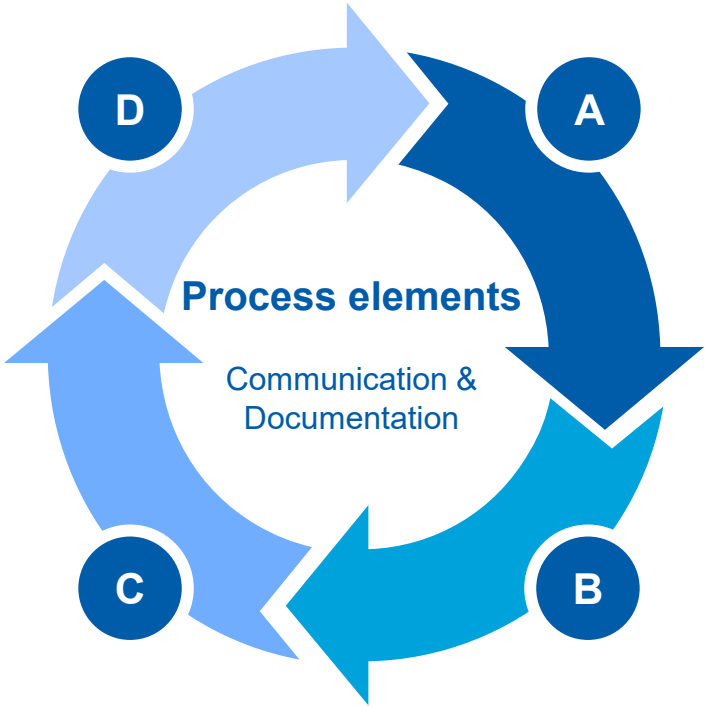
Physical Risk Management from insurance perspective

A Risk Management Process

Control

- **Risk inventory**:
  Portfolio risk profile development
- Documentation
- Risk culture
- Risk improvement
  impact status





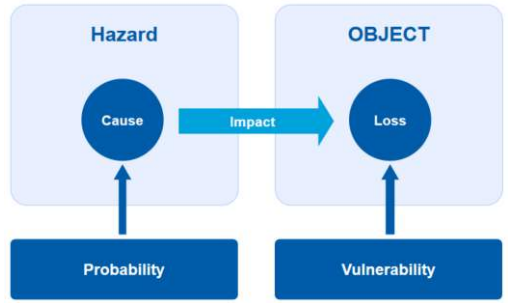
Identify

Methodology:

- Scenario Analysis (Insurance industry)
- Failure Mode Analysis (Engineering)
- others

Considerations:

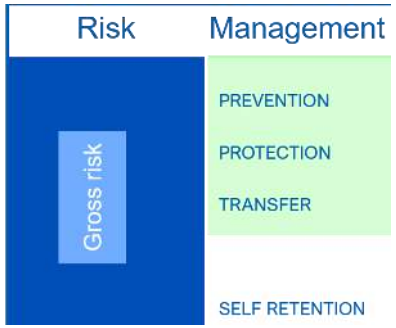
- Historical Experience
- Technological Changes
- Climate Impact



Steer

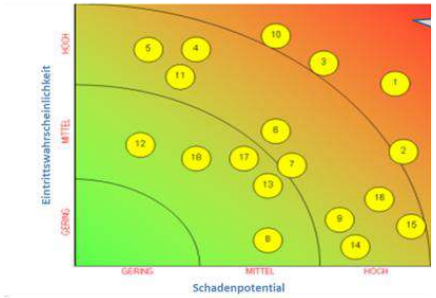
Adaption measures to prevent, protect and/or transfer:

- Constructive
- Technical
- Organisation, Business Continuity
- Strategy
- Location
- Business Model at all



Evaluate

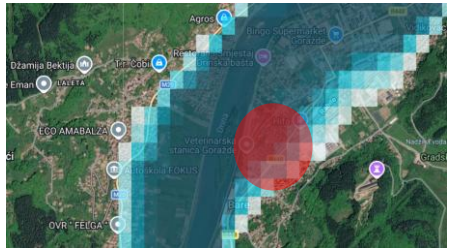
- **Qualitative:** Probability incl. existing preventive measures
- **Quantitative:** Potential incl. existing protection measures
- **Risk Portfolio**: Heat Map

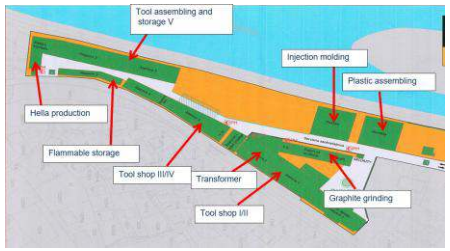


Insurance: Example Flood evaluation

Cause









Loss: Evaluate financial impact

Insured

Direct Physical Damage

% of affected asset base destroyed or damaged. Includes structural repairs, equipment replacement, inventory loss.

Business Interruption

Revenue loss from halted operations, counted only for the production or service actually tied to the affected location.

Non insured

OPEX Increase

Higher ongoing costs: energy, logistics re-routing, emergency admin, drying/remediation work after an event.

Penalties & Contracts

Financial consequences that arise specifically because the scenario triggers delivery failures, SLA breaches, or regulatory fines.

Capital Expenditure

Only included when a mitigation measure is being evaluated, quantifying the investment required to reduce residual risk.

Emerging Risks

DROUGHT / AUSTRIA

“Historic drought disaster”: €1 billion in agricultural damage

The Austrian Hail Insurance estimates €1 billion in drought losses across agriculture.

DER STANDARD (Austria), 10 Aug 2026*

FLOODING / UK

The emerging risk that’s ‘breaking’ the insurance industry and could make 3 million homes ‘worthless’

Flood risk can restrict insurance access and affect property values and mortgage availability.

The Independent (UK), 29 Oct 2025

RIVER TRANSPORT / GERMANY

Rhine drought strands ships and forces German production shutdowns

Low water levels disrupt freight transport and force manufacturers to reduce production.

Financial Times (UK), 31 Jul 2026

CLIMATE DISASTERS / EU

Climate disasters in 2025 leave Spain, Romania, Cyprus seeking EU relief

The European Commission proposes support to restore infrastructure after floods and wildfires.

The Brussels Times (Belgium), 18 May 2026

WATER SUPPLY / FRANCE

Persistent drought puts pressure on France’s drinking water networks

A rainfall deficit leaves the water reserves supplying French distribution networks under strain.

Le Monde (France), accessed 3 Nov 2026

EXTREME HEAT / FRANCE

Summer 2026 becomes, by far, the hottest ever recorded in France…

Le Monde reports that such a summer would have been virtually impossible without human-caused climate change.

Le Monde (France), 4 Sep 2026, excerpt

* English translation. Ellipsis marks a headline excerpt. Sources are linked in the publication lines.

UNIQA SUSTAINABLE

Climate Risk Analysis

Brewery in Austria

~ 50 employees
~ Annual production: approx. 120,000 hl~
Turnover: 15 million euros



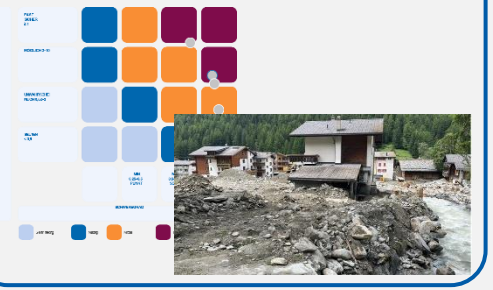
- Location near the river with historically grown infrastructure and limited alternative areas
- Low-lying production and storage areas that are potentially at risk of flooding during heavy rainfall

Insurable risks

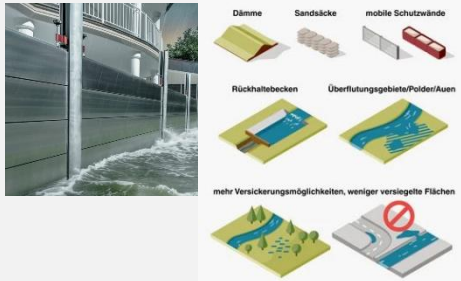
Flooding

- Increase in **heavy precipitation** as a result of climate change
- Location of the brewery near **a river/body of water**
- **Endangerment** of **production areas, storage areas** and technical infrastructure

- River flooding as the biggest threat.
- This results in business interruption
- Significant maintenance costs



- Preventive measures reduce effects almost completely
- Specific measures that reduce recovery time

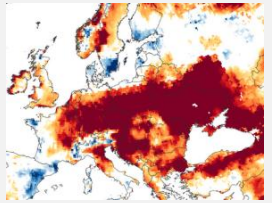


Uninsurable risks

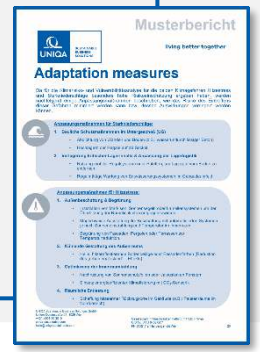
Drought

- High **dependence of the brewery on water** as a central production factor (brewing process, cooling, cleaning)
- Increasing frequency and duration of **dry periods** as a result of climate change
- Falling **groundwater and spring water levels**
- **Dependence on raw materials** (hops) & suppliers (supply chains)

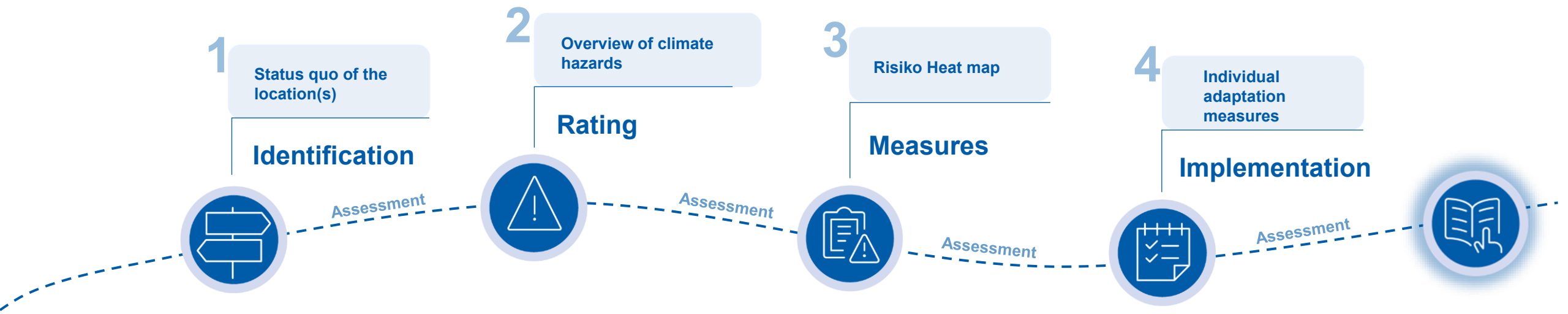
- Limited water availability jeopardizes production volumes and quality
- Production interruptions
- Rising costs due to water purchases, alternative cooling methods or requirements
- Potential reputational and acceptance risks



- Reduction of specific water consumption
- Water cycles and reuse
- Adaptation of cooling and process systems
- Emergency and prioritization plans for dry periods



Risk analysis summary



Physical Risk Management Essentials

CORPORATE CUSTOMERS

Physical risks are business risks

Climate and natural hazards affect assets, operations, supply chains and ultimately financial performance.

Resilience starts before the loss happen

Understanding exposure is only the first step. Prevention, adaptation and business continuity turn risk insight into resilience.

From risk prevention to risk transfer

UNIQA Sustainable combines insurance expertise, climate analytics and risk engineering to help companies prevent, reduce risk and strengthen long-term resilience.

INSURERS

Claims and accumulation

Asset damage and business interruption drive claims. Concentrated locations can amplify catastrophe losses.

Underwriting and prevention

Pricing, coverage terms and adaptation measures reflect exposure and vulnerability.

Financial resilience

Reinsurance and climate scenarios inform solvency. Investment portfolios also face physical risk.

BANKS

Borrowers and collateral

Damage and disruption weaken cash flows, increasing default risk and reducing collateral recovery values.

Lending and portfolio limits

Location risks, insurance cover and adaptation plans inform credit decisions and concentration limits.

Financial resilience

Climate scenarios inform credit losses and capital needs. Business continuity protects operations.


UNIQA
SUSTAINABLE
gemeinsam
besser leben

Nature-conscious resilience strategies: mitigating risk and biodiversity impacts



© García Latorre, BMLUK

Jürgen Schneider

Director-General, Environment and Climate

Federal Ministrey Agriculture and Forestry, Climate and Environmental Protection, Regions and Water Management

Resilience strategies that draw on nature



© García Latorre, BMLUK

Nature-based strategies: a source of resilience

Ecosystem services: direct / indirect benefits provided by Nature that sustain human life, well-being and the economy

Nature-based solutions: actions that protect, manage, or restore natural ecosystems to solve societal problems

Implementation

The Biodiversity Strategy 2030+
The Austrian Strategy for Adaptation to Climate Change

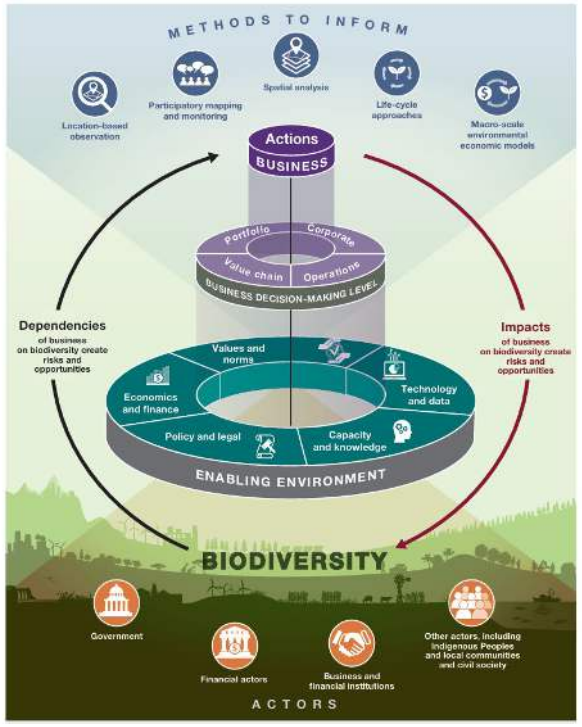
The Strategies



© García Latorre, BMLUK

- **The Biodiversity Strategy 2030+**
  - **10-Points-Programme:**
    - Goals
      - e.g. Improving the status and trends of species and habitats
    - Requirements
      - **e.g.: Adequate funding**
- **The Austrian Strategy for Adaptation to Climate Change**
  - **14 fields of activity**
    - e.g. agriculture, tourism and **ecosystems and biodiversity**

Business and Biodiversity



IPBES-12 (2026): “Business and Biodiverstiy Assessment” was accepted

- KM1: “All businesses depend on and impact biodiversity and can be agents of positive change”
- BM A8: „Business impacts and dependencies create both risks and opportunities for businesses (well established).“ -> nature-based solutions as a managing option

Source: IPBES (2026). Summary for Policymakers of the Methodological Assessment Report on the Impact and Dependence of Business on Biodiversity and Nature’s Contributions to People. Jones M., Polasky S., Rueda X., Brooks S., Carter Ingram J., Egoh B. N., von Hase A., Kohsaka R., Kulak M., Leach K., Loyola R., Mandle L., Rodriguez-Osuna V., Schaafsma M. and Sonter L. J. (eds.). IPBES secretariat, Bonn, Germany. DOI: https://doi.org/10.5281/zenodo.15369060

Thank you for your attention!

Section 3 – AI, cybersecurity and the race for resilience



Raiffeisen Bank International

How resilient IT infrastructure guarantees the foundations for sustainable business

Group Security & Resilience | Robert Wagenleitner & Clemens Faustenhammer

Raiffeisen Bank International

How resilient IT infrastructure guarantees the foundations for sustainable business

IMF · GLOBAL FINANCIAL STABILITY REPORT · OCTOBER 2026

“Weaker or less durable AI investments and profitability could be a shock that triggers a market correction.”



The IMF sees three plausible near-term catalysts for “a sharp tightening of financial conditions and market turmoil”:

- AI market correction
- Higher government borrowing costs
- **Large-scale cyber attack**

Raiffeisen Bank International

Agentic AI Cyber Security Risks

We need to build guardrails / technical implementations for the secure usage of AI Agents → Security by Design

Over-permissiveness

Agents have access to data they don't need for the tasks.

Agents break out of intended tasks and elevated privileges

→ Proper access management and regular review of permissions for all data storage

AI Agent identity

Knowing whether activities have been performed by a human or an agent. Risk of sharing human credentials with agents

→ Own AI agent identities; access review for agents

Data Leakage/Loss

Data leakage/loss by AI agents unintentionally transferring data.

→ Creation of data transfer boundaries; verify usage of guardian agents

MCP Servers & Unauthorized Access

Unauthenticated access to MCP serves raise the risk of data leakage.

Missing transparency on MCP servers create unknown entry points for company systems and data

→ MCP server proxy; authenticated MCP/API access only

Shadow AI

Deployment of non-approved AI agents/tools raising the risk of missing knowledge where company data resides, unsecure storage of access credentials, etc.

→ Automatic detection of AI agents to create transparency/visibility; Registry of AI agents

Supply Chain Security

Third party libraries containing malware and/or other compromised parts

Code generation incl. vibe coding increases the risk of vulnerable and/or malfunctioning code including data leakage risk

→ Code verification (technology & human) including third party libraries

Raiffeisen Bank International

RBI Understanding: Resilient IT infrastructure needs a 360° view

Technology
Applications, platforms and data built for failover and recovery

Infrastructure
Data centres, networks, cloud and power – redundant and diversified

Third parties
Cloud and service providers – dependencies, concentration, exit plans



BCM
Business continuity management: critical services, recovery plans

Cyber security
Prevent, detect, respond – including AI-driven attacks

People
Skills, clear roles and decisions under pressure

Operational resilience is the ability to keep critical business services running through any disruption.

Raiffeisen Bank International

The AI boom reshapes the risk landscape and brings new challenges for IT infrastructure

1	**Autonomous AI agents create new security exposure**	Hugging Face, July 2026: an **autonomous agent system** ran a breach end to end – thousands of actions, stolen credentials, lateral movement.
2	**Infrastructure collapse becomes a macro risk**	Massive investment made AI a pillar of global growth. IMF chief Georgieva: **“an economy that is standing on one leg, the AI leg.”**
3	**Concentration on hyper-scalers deepens mutual dependencies**	Chips, data centres, servers, software devour vast sums. IMF: ~$300bn in circular equity deals, ~$650bn of debt, **$1.4tn in future commitments**.
4	**Cloud capacity becomes a bottleneck**	Amazon CEO Andy Jassy, October 2026: **“2027 is largely sold out.”** Even “a good chunk of 2028” is already committed.
5	**Geopolitics reaches the data centre**	March 2026: **drone strikes cut power at AWS data centres** in the UAE and Bahrain; customers were asked to move workloads to other regions.

Resilience is more than your own infrastructure

Think in scenarios
Blackout, autonomous agent systems, a “rogue-agent swarm”: test against concrete cases.

Practise for the crisis
Run regular emergency and crisis drills – “preparedness exercises”.

Govern AI is a must
AI governance is emerging as both a compliance requirement and an operational control capability.

Spot collateral effects early
Recognise knock-on effects in time and derive company-specific measures from them.



In the end, the human factor counts.

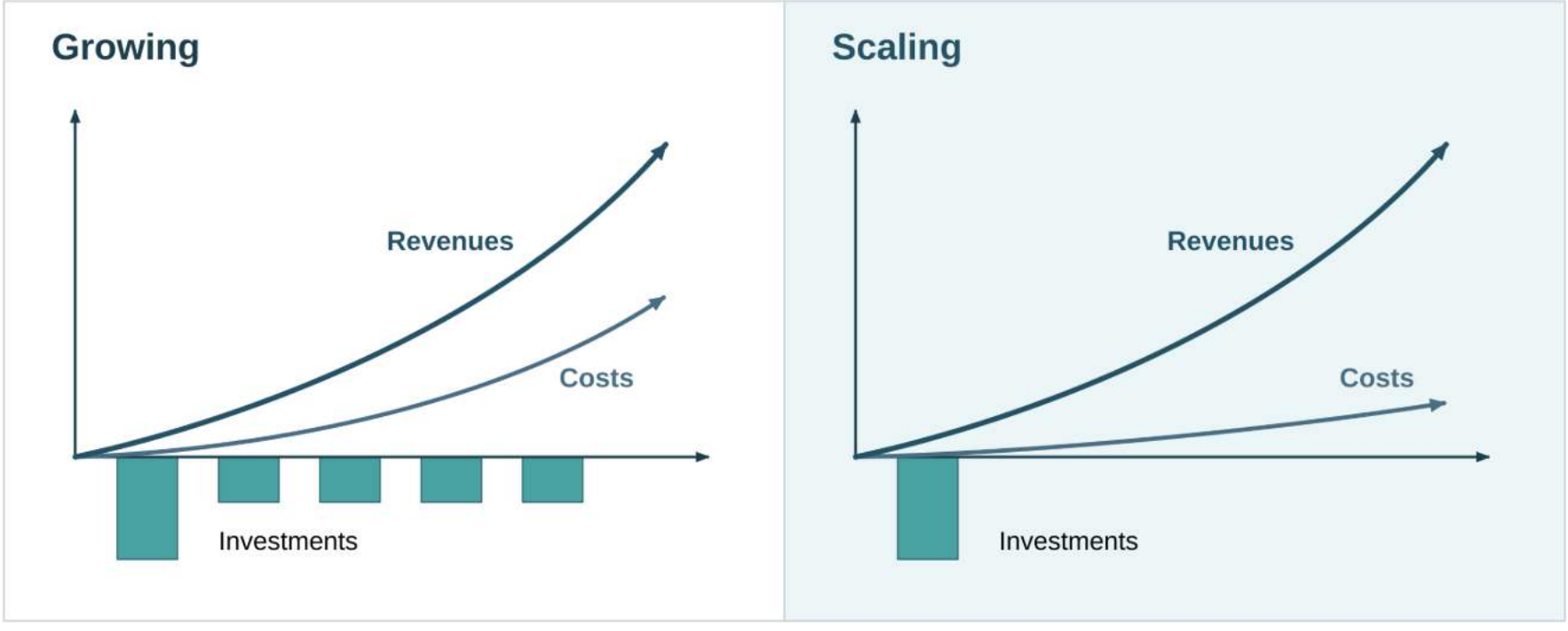
Tech-driven growth & Sustainability

WU EXECUTIVE ACADEMY

Sebastian Kortmann



Growing vs. Scaling – Revenue, Costs, and Investment over Time



Scaling is inherently **more sustainable** as growth is achieved with less resources

Simple revenue growth vs. sustainable scaling

Revenue growth	Revenue increases. Costs and resource demand may increase alongside it.
Financial scaling	Revenue grows faster than total costs. The cost per unit of revenue falls.
Sustainable scaling	Value grows faster than resource use. Total impacts stay within sustainable limits.

How technology helps

Reuse productive assets and extend product life. More useful service can come from fewer new resources.

What makes the growth sustainable

Track total impact across the value chain. Keep ethical commitments binding as the business expands.

Three ways of achieving more scalable and sustainable business

Decentralized Technologies and Ecosystems

Value-Based Business Models & Unit Economics

Co-Opetition

Three ways of achieving more scalable and sustainable business

Decentralized Technologies and Ecosystems

Value-Based Business Models & Unit Economics

Co-Opetition

CARBONMARK

BETA

Your Wallet Address:

0xC79...4Ec VIEW

Marketplace

Retire

Profile

Portfolio

BOOK A DEMO

Search for a project

FILTERS

Sort: Recently Updated

312 Results



$0.49

4×50 MW Dayingjiang- 3 Hydrop...

The Dayingjiang-3 Hydropower Project Phases 1&2 in Yunnan Province, China, is a renewable energy project that generates

2008 | Renewable Energy



$1.50

Inner Mongolia Chao'Er Improve...

The Chao'er Forest Industry IFM Project is a forest conservation project in Hulun Buir City, Inner Mongolia Autonomous Region, China,

2012 | Forestry



$0.76

Cecic Gansu Yumen Ch

The CECIC Gansu Yumen No.3 Wind Farm Project g renewable electricity fro Yumen Town, China. This

2020 | Renewable Ene



$0.66

Wind Based Power Generation B...



$0.66

Grid-Connected Wind Electricity...

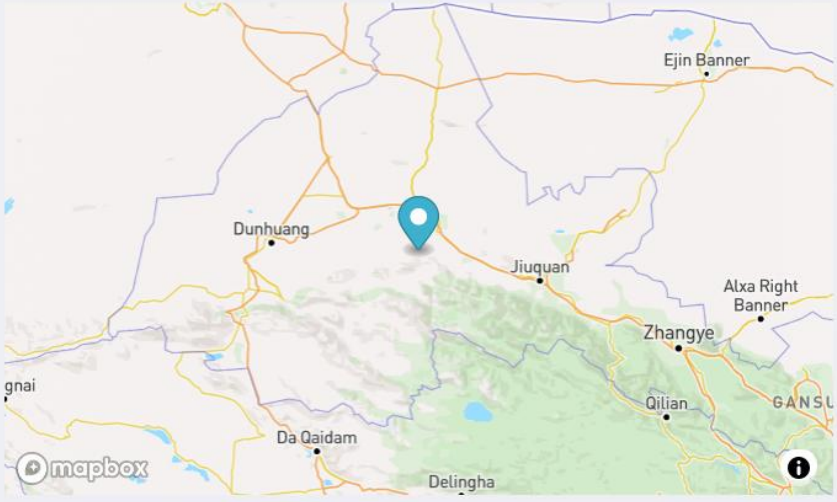


$0.66

Hanuman Ganga Hydr

$0.76 **Best Price**

Methodology
ACM0002



Description

CECIC Gansu Yumen Changma No.3 Wind Farm Project is a renewable energy initiative located in Yumen Town, Yumen City, Gansu Province, in the People's Republic of China. The main objective of the project is to provide clean, renewable electricity to the Northwest China Power Grid. Currently, the NWPG relies heavily on fossil fuel-powered thermal plants to meet the electricity demand in the region, which results in the release of high levels of CO2 emissions.

Key Highlights:
- The wind farm project generates renewable electricity from wind, which is a clean and sustainable source of energy.
- The electricity generated by the wind farm is supplied to the NWPG, reducing the reliance on fossil fuel-powered thermal plants

Read More

VIEW REGISTRY DETAILS

Listings

We found 1 prices for this project:

Carbon Pool **Best Price**

$0.76

UBO

Quantity Available: 493

BUY RETIRE NOW

Stats

Data for this project and vintage

Total Retirements:	1.81
Remaining Supply:	510.19

Activity

🌱 Transaction complete

1 Tonne of carbon was permanently retired on your behalf.

View and share your proof-of-retirement page.

Return to carbonmark.com and offset more carbon.

CARBONMARK

This payment was processed by Offsetra LLC using the Offset Checkout API.
Questions? Contact us at support@offsetra.com

Customer ID
`0068d95e-b6f0-4d1c-ae35-2846fb323a06`
Payment Record ID
`pi_3NVCtVHnwoNLtWUk0IWZ9shS`

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Three ways of achieving more scalable and sustainable business

Decentralized Technologies and Ecosystems

Value-Based Business Models & Unit Economics

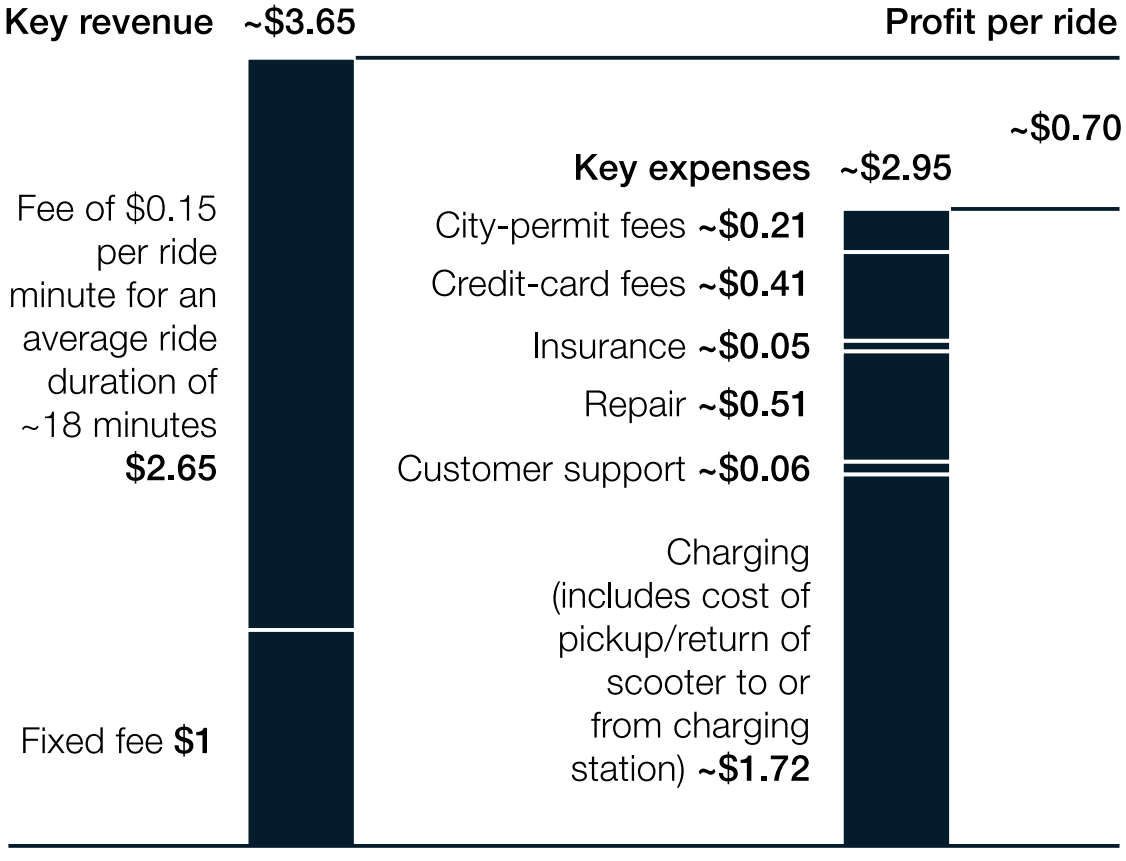
Co-Opetition


BIRD
BIRD


KETTLER
KETTLER KETTLER KETTLER KETTLER KETTLER

An e-scooter is economical after four months.

Revenue-and-expense estimate, per e-scooter ride, $



Break-even point

For vehicle-acquisition costs of **~$400** and a utilization rate of



5 rides a day,

an e-scooter is economical after **~114 days**, or **<4 months**

From transactional- to value-based business models

WU EXECUTIVE ACADEMY

Business Model	Example	Value Proposition	Pricing/ Unit Economics	Technology/ Capabilities
Transaction-based business model	OEMs/ platforms mobile.de	**Availability, flexibility, independence**	**Price/car** (once)	Combustion engine, engineering/R&D skills
Subscription-based business model	Sixt SIXT	Availability, flexibility, indep.+ **reduced inv. risk (resale)**	**Price/time of usage** (regular payments, e.g.. monthly)	Maintenance/refurbishment capabilities, financial planning
Usage-based business model	Uber	**Transparency, fairness, cost control, disposable income**	**Price/ride** (depending on time/location/demand/weather)	App/software, mobile devices, pers. account & fleet mgmt.
Shared business model	BlaBlaCar	**Democratization of costs, synergies, joint experience**	**Shared price/ride** (alt. per time/unit, e.g., family plans)	Digital wallets, connected mobile devices, P2P interaction
Experience-based business model	Porsche Passport	**Globally available, personalized experience**	**Price/time of usage** (regular payments, e.g.. monthly)	Autonomous Mobility, Blockchain/AI, Digital Wallets

EQUIS ACCREDITED AACSB ACCREDITED AMBA ACCREDITED



CHEP
A Brambles Company



Multiplying the value created for customers while preserving resources

Three ways of achieving more scalable and sustainable business

Decentralized Technologies and Ecosystems

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Co-Opetition


IONITY


vetropack
Gösser
BIOSTOFF
LAGER

Sustainability + Tech-Driven Growth = Scaling