

Finding value in your net zero journey: From baseline to action

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Meet Today's Speakers ...

*Here
today*



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Finding value in your net zero journey

Context

- 1** Baseline – Calculate Emissions
 - Understand complexities of Scope 3
 - Gain insights on best practices
 - 2** Decarb plan – Size Impact of Actions
 - Optimize abatement lever selection
 - Understand how to use MACCs
 - 3** Action – Procurement & Enablers
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 - Discuss Cost & CO2 negotiations
-

Q&A
Discussion



Value is achievable by combining carbon and cost

Introducing: Dual Mission

Cost & Carbon

- Leverage traditional **Design to Value** approach to eliminate waste and reduce cost (e.g., concept reduction, redesign)
- Utilize full proven cost reduction toolkit (e.g., commercial gap closure)
- Add new **Carbon Lens** (e.g., material swap, circularity, virgin materials reduction)
- Address decarbonization pressure across company and supply chain with win-win levers

Why it's better



- Enables a more robust pipeline, adding the carbon lens enables more creative ideas
- Identifies win-win initiatives that reduce carbon and save cost
- Creates high employee engagement, front line colleagues are excited to attack carbon

10% Cost + **10-40% Carbon**

Savings achievable within 2 years

Sustainability is an opportunity for value creation, as regulations will require thousands of companies to expand emissions reporting

The time to choose is now..

Compliance

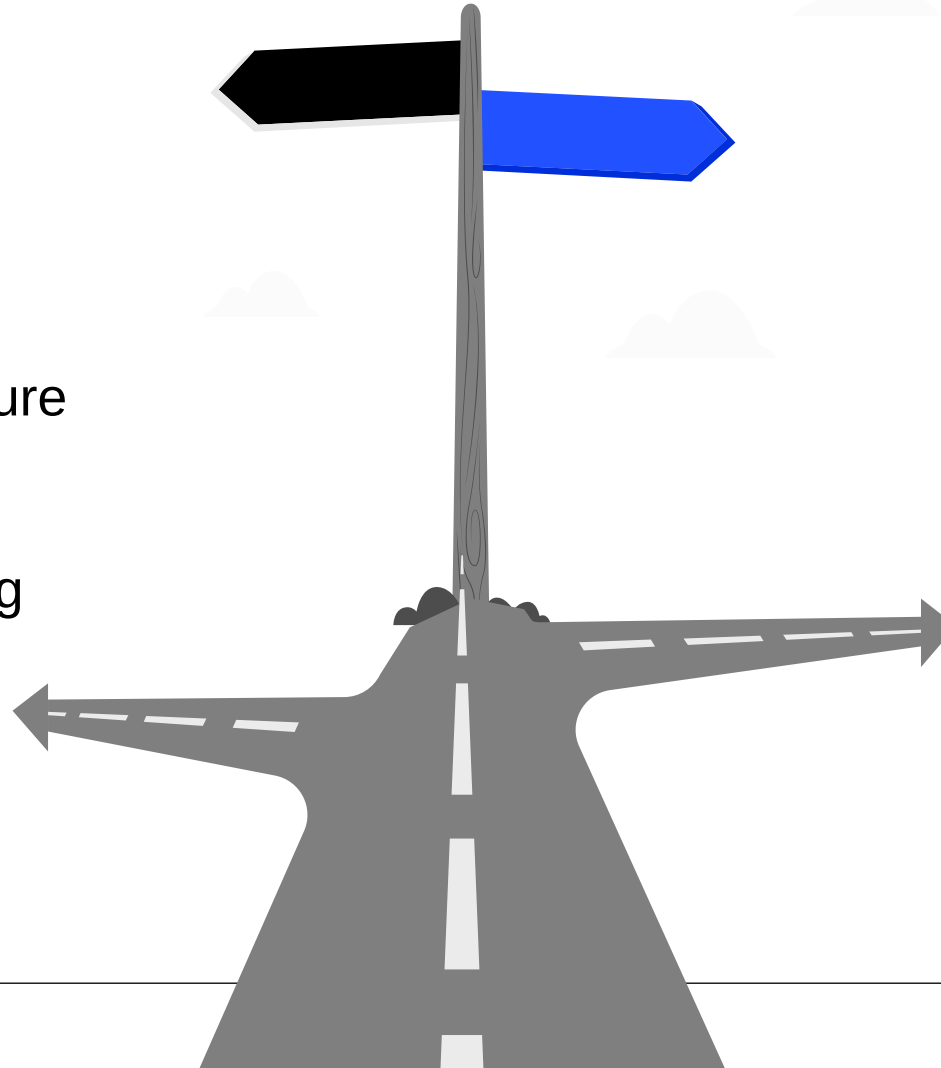
Understand, and fulfill, the minimum reporting requirements set by legislature

Achieve no recovery cost associated with only meeting the requirements, and let others explore new green business opportunities

Value Creation

Seize the opportunity to create new sustainability-centered business models and value as a front-runner

Re-assess business strategy by better understanding opportunities for low carbon products, and mitigating real physical, transition risks

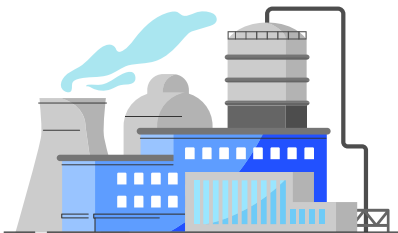


Across industries Scope 3 is the major emission driver and therefore our focus for today

Non-exhaustive

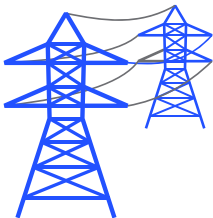
Emissions Scopes

Scope 1 -
Direct
Emissions



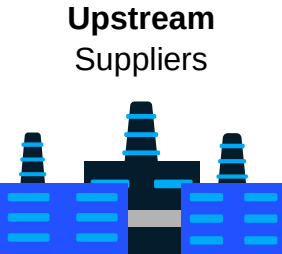
Fuel
combustion
(on-site)

Scope 2 -
Indirect
Emissions



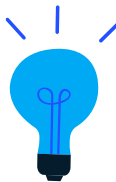
Electricity, Heating

Scope 3 -
Indirect
Emissions



Purchased goods &
services

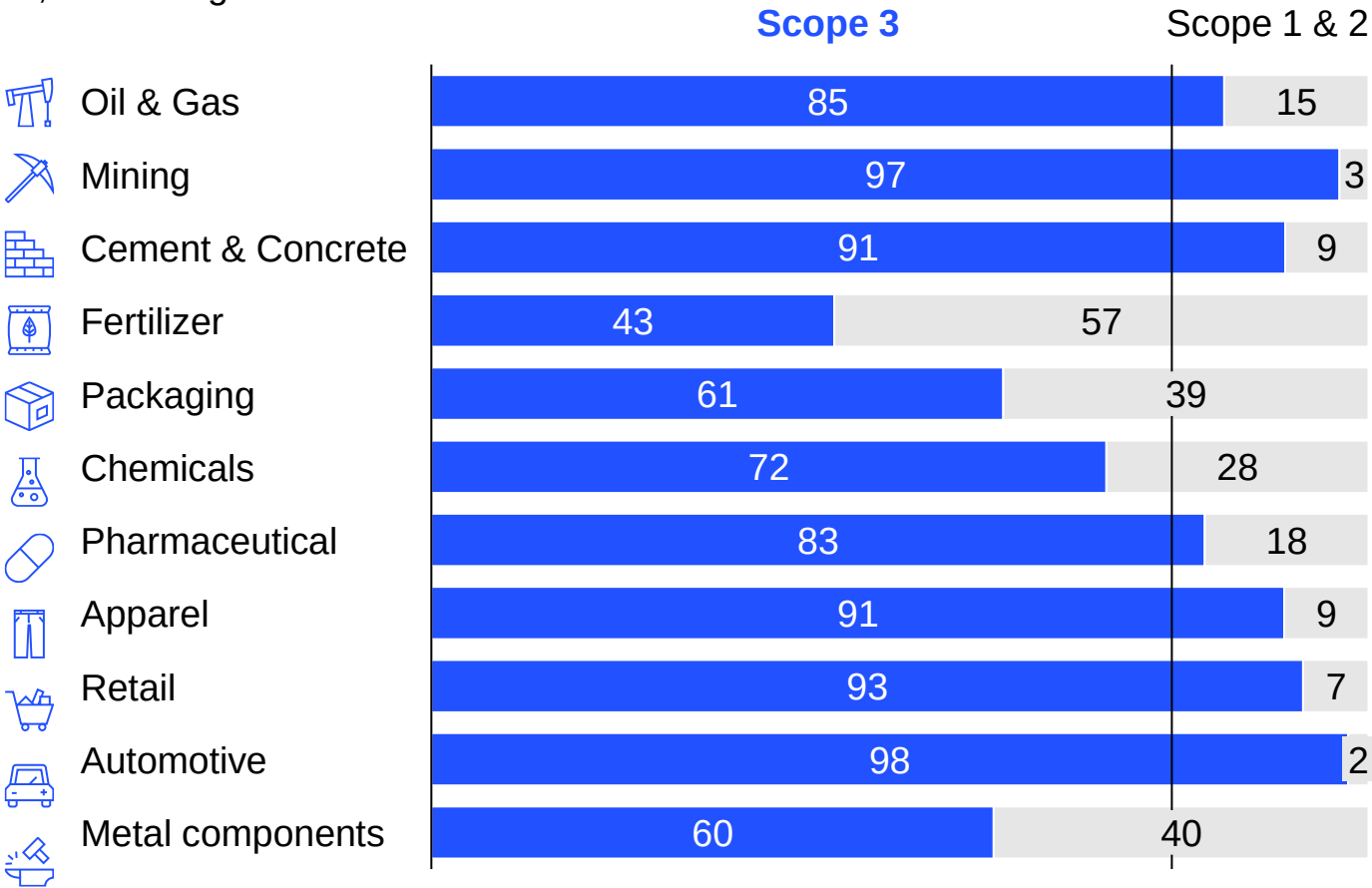
Downstream
Customers



Use of sold
products

Distribution of Greenhouse Gas (GHG) Emissions Across Scopes

%, Percentage



Average = 79%

How do you get started? Baseline emissions and size impact of decarbonization actions



1. Baseline – Calculate Emissions

Calculate emissions at company-, asset- and/or product-level

Use insights for reporting, target-setting (SBTi), and to engage suppliers

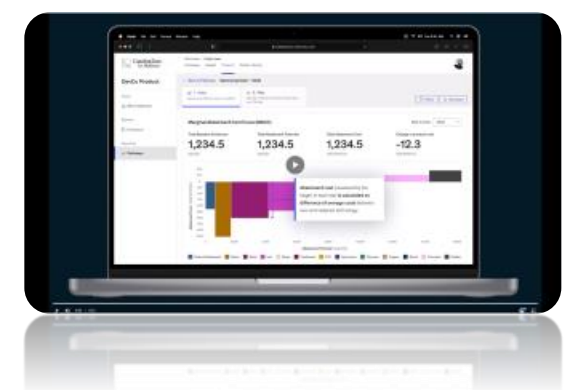




2. Value – Size Impact of Actions

Link emissions to decarbonization business cases (CO2 impact/cost)

Optimize decarbonization based on maximum CO2-reduction / per-cost



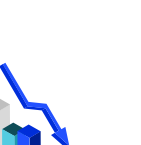


3. Plan – Create Granular Plan

Build granular, bottom-up plan of actionable decarbonization initiatives

Prioritize and sequence initiatives on a cost-, time-, and feasibility-basis

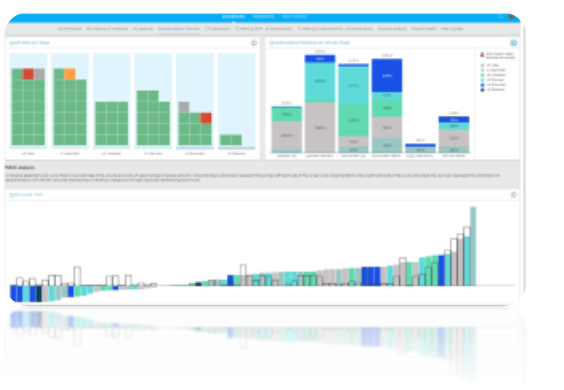




4. Act – Implement Strategy

Implement actions, monitor progress allowing plan to be revised as needed

Capture value of decarbonization at product-level for customers



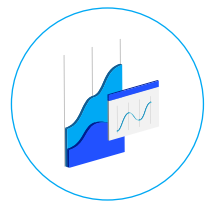
Finding value in your net zero journey

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Q&A
Discussion

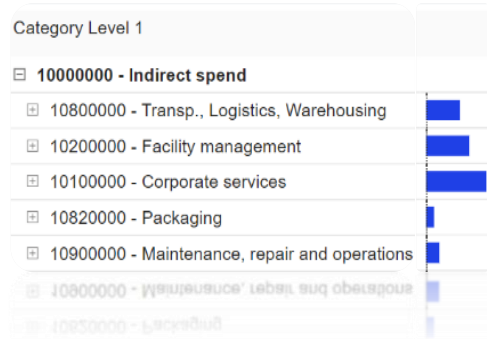
1. Scope 3 emissions baselining is a multi-step process and sets the basis for decarbonization by identifying top emissions contributors



Create a Single-source of Truth for Procurement Data

Extract, harmonize data from ERP systems, and flat-files

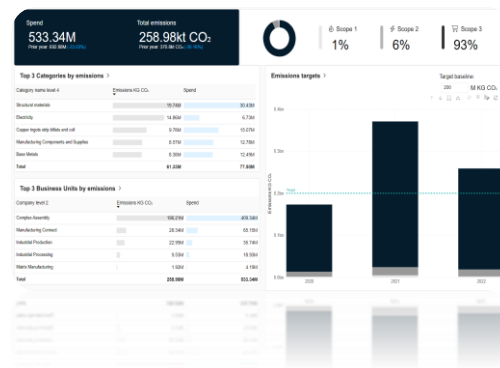
Automatically refresh data on a recurring monthly basis



Calculate Emissions using a Spend-based Approach

Apply spend-based emission factors at category-level

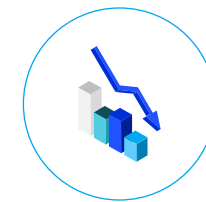
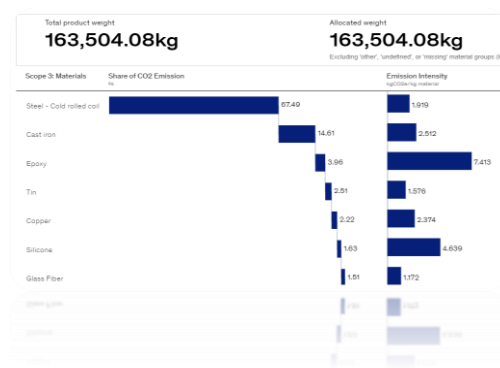
Comprehensively calculate emissions & identify top emissions contributors



Refine Emissions on a Consumption-basis

Improve emission factor granularity to consumption-based approach

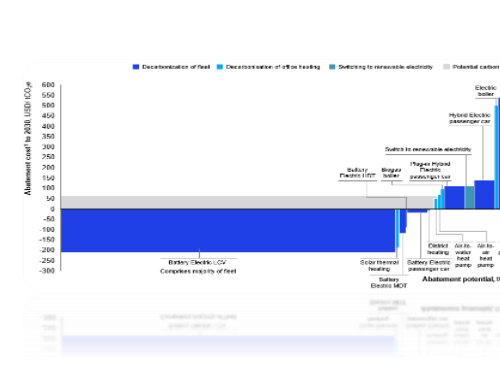
Create product-carbon footprints for customers, and begin to engage suppliers



Link Insights on Emissions to Decarbonization Actions

Use material-specific decarbonization lever business cases (USD/tCO₂ abatement)

Optimize selection of actions at max CO₂-reduction-per-cost



1. There are multiple types of emission factors and companies may need to use a combination, or 'hybrid' methodology for reporting

Journey of Emission Factor (EF) Maturity



Low - Spend-Based EF

- Readily available, less accurate
- Allow for comprehensive coverage of emissions estimate
- Sufficient granular for most emissions reporting



Medium - Consumption-Based EF

- More granular, more accurate
- Gain insight on material and product carbon footprint
- Use insight for green material sourcing decisions
- Allows linking material volumes to decarbonization levers



High - Supplier-Provided EF

- Most granular, most accurate
- Leveraged based on availability (typically low)
- Requires supplier engagement / request-for-info
- Allows for supplier selection based on emissions

EF Format

Spend-based EF
(kgCO₂e / currency)

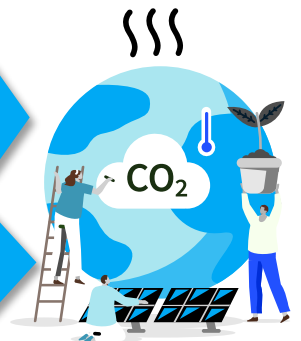
Consumption-based EF
(kgCO₂e / kg)

Supplier-specific EF
(kgCO₂e / product)

Remaining
spend

Priority Categories

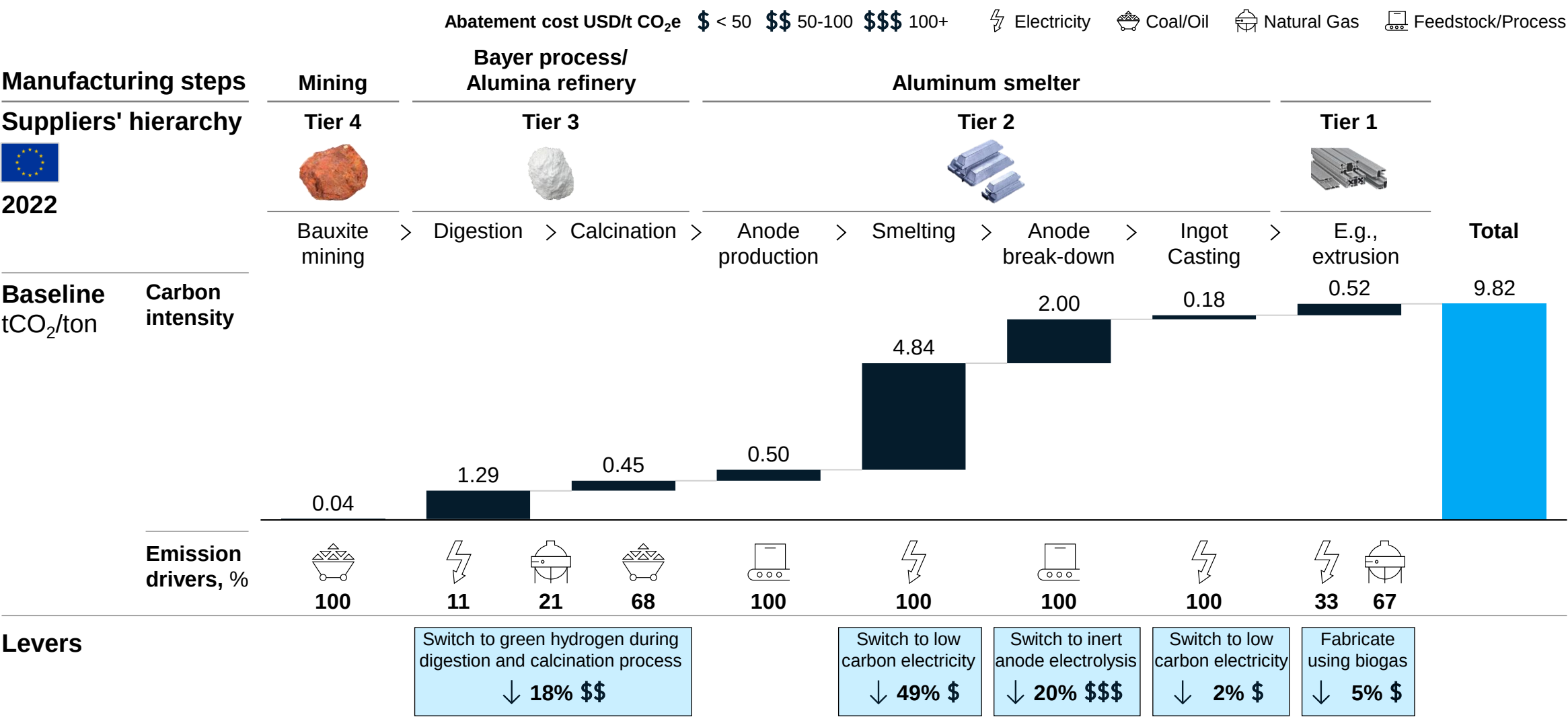
Based on
availability



**Estimate of
Greenhouse
Gas impact**
(kgCO₂-equivalent)

1. Understanding of the value-chain is key for accurate emissions calculations and to quantify Cost/CO2 impact of decarb actions

Example EU Aluminum supply chain, 2023



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2. Decarbonization levers can also achieve the dual mission of reducing both cost and emissions and should be prioritized

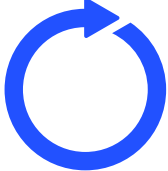
Illustrative Preliminary

CO2 % Carbon or cost reduction potential compared to baseline part
Cost %



Reuse materials from scrapped parts

CO2	Cost
-20%	-10%



Recycling & circulating

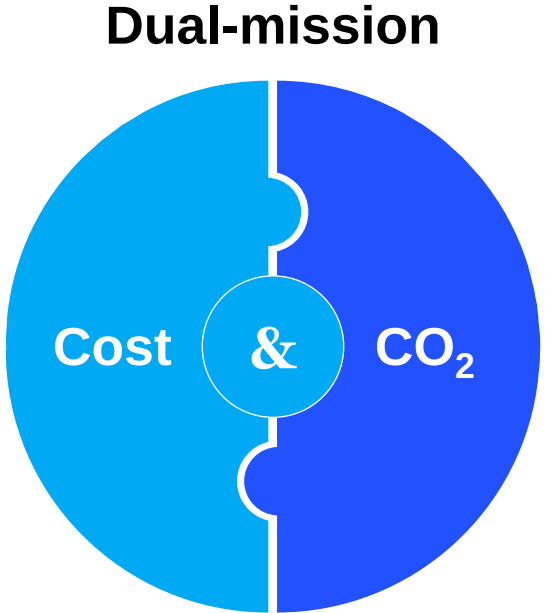


Switch from Aluminum knuckle to steel knuckle

CO2	Cost
-55%	-50%



Design shift



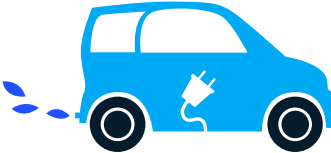


Features optimization

CO2	Cost
-8%	-12%



Eliminate paint from non-visible part



Energy efficiency

CO2	Cost
-60%	0%



Source aluminum from low carbon electric smelters



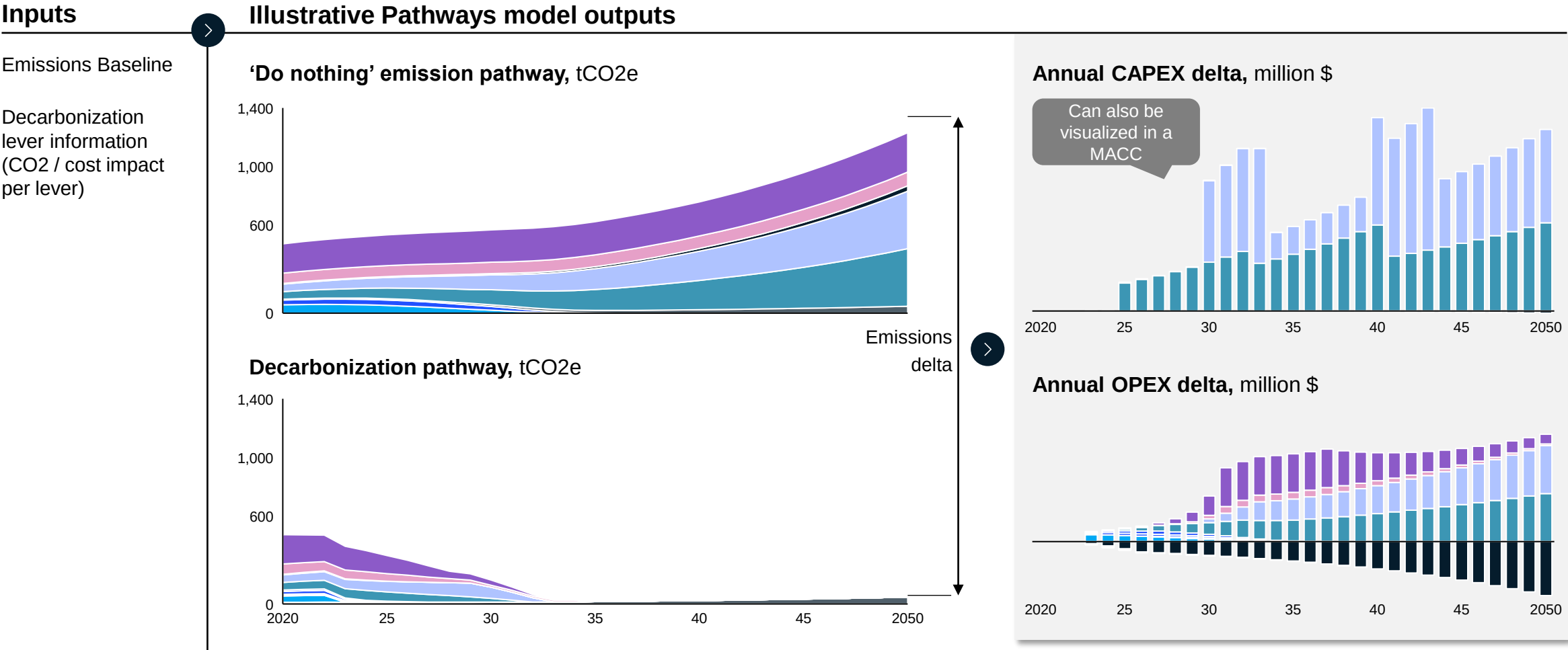
Scan for new suppliers and change manufacturing locations

CO2	Cost
-20%	-8%

Negotiation & alternative suppliers

2. Applying implementation timing to decarbonization levers allows a “Pathway” to be established informing whether targets will be met

Conceptual



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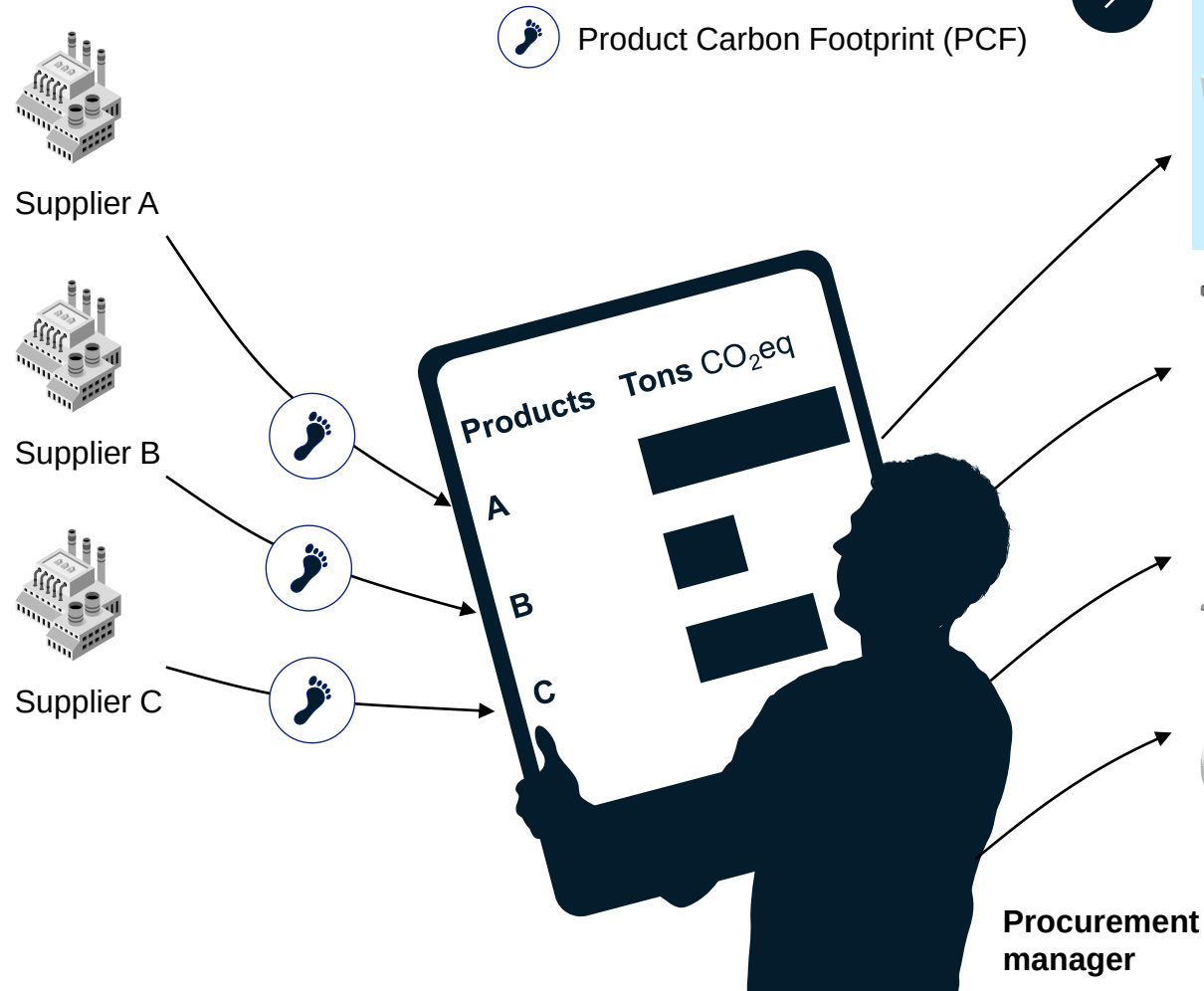
Q&A
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3. Procurement can enable decision-making for the organization based on carbon intensity to drive collaboration across roles

■ Deep-dive follows

Seamless access to accurate product-level emissions data from suppliers...



Product Carbon Footprint (PCF)

... enables carbon-informed decision-making across the organization



Procurement

- Embed **carbon intensity** into **supplier selection** and identify **new sourcing opportunities**
- Inform **contract negotiations**
- **Partner with suppliers** to decarbonize



R&D

- Make **product design decisions** and choose **low-carbon emitting materials**
- Design **new low-to-zero-carbon products**



Sales & marketing

- Implement **carbon labels and tags** to enhance transparency and introduce **premium pricing** for low-to-zero-carbon products

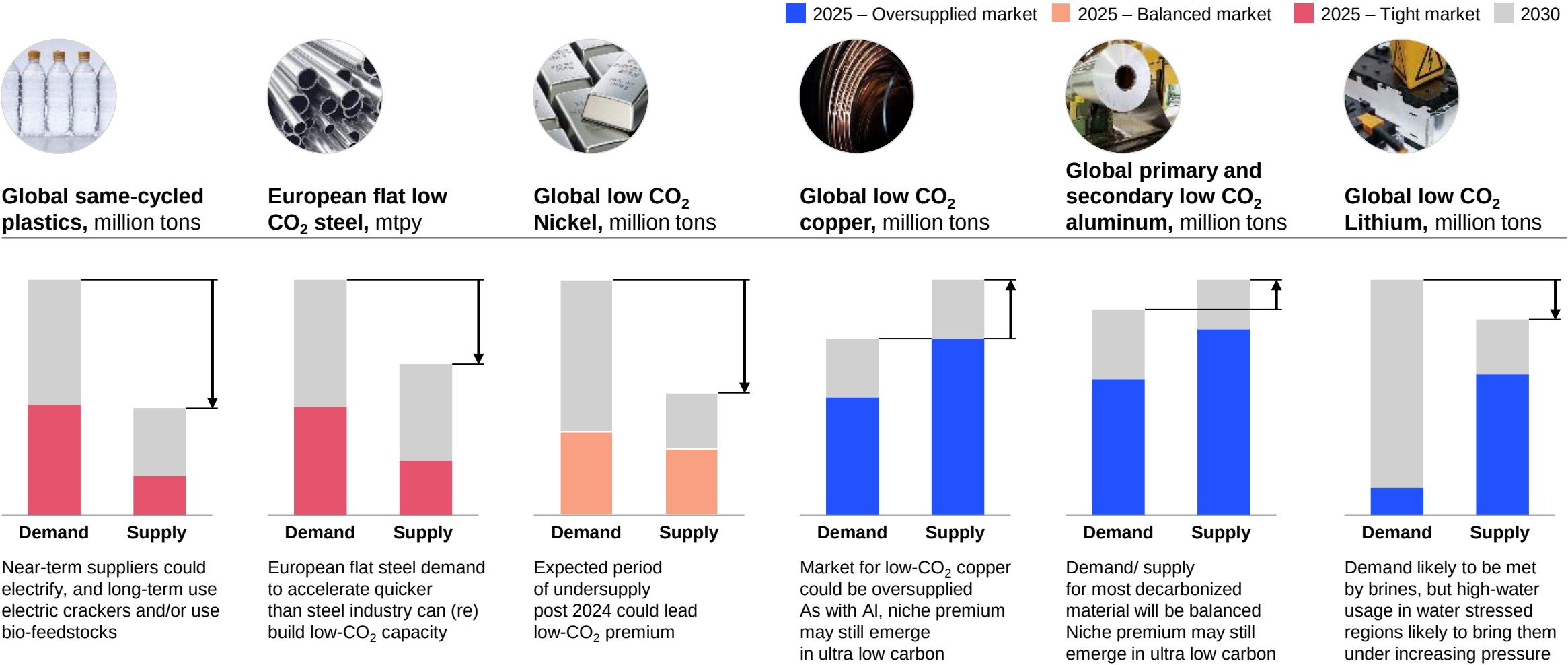


Sustainability

- Establish a **robust carbon baseline**
- Set **decarbonization targets** and **track progress**
- Comply with **regulations** (e.g., CBAM)
- Disclose **voluntary Sustainability reports**

Procurement manager

3. Many low-carbon materials like plastics, steel, and nickel could be short in supply; therefore it is essential to secure supply



No market-wide premium expected but niche premium could still emerge on specific sub-segments (e.g., Aluminum and Copper)

3. For Procurement to take action, Organizations must create the data foundation for decision-making and adapt their way of working



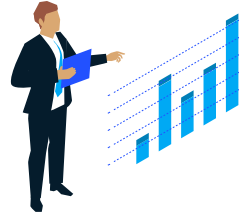
Construct baseline and refine with primary data

- Develop scope 3 baseline improving over time
- Prioritize and select high emission categories
- Develop sustainability questionnaire to gather primary supplier data



Identify decarbonization levers

- Develop integrated sourcing strategy for materials (E.g. steel, share of green steel, sourcing locations etc.)
- Map the key process steps for each category value chain
- Size the relative emissions
- Evaluate decarbonization levers for each step to achieve the required target
- Consider setting Internal Carbon Prices (ICPs) to consider potential cost of embodied carbon (e.g. CBAM)



Start supplier dialogue

- Identify key suppliers and send out RFI's - and/ or start dialogue about decarbonization measures
- Upon receiving RFI's segment suppliers based on decarbonization maturity and emissions
- Evaluate suppliers across multiple criteria (cost, quality and sustainability)
- Develop concrete roadmap for supplier activation incl. collaboration opportunities



Decide about supplier interaction

- Run supplier workshops with core suppliers
- Highlight the importance of strategic collaboration with suppliers and explore partnership opportunities
- Allocate identified levers on a supplier-specific basis

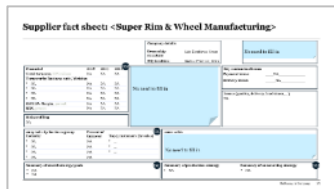


Progress tracking and structural anchoring

- Conduct regular review meetings with suppliers
- Adapt procurement processes such as policies and RFX
- Develop internal training for capability building
- Adapt KPIs and performance management to account for decarbonization

4. Supplier Negotiations: Effective two-way dialogues start with fact-based information on supplier performance, and sustainability

Supplier-specific facts



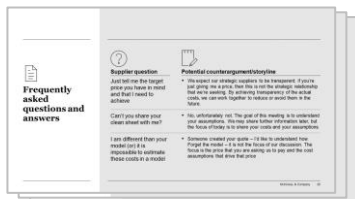
Supplier fact sheet

Summarize supplier's situation and current contract terms



Negotiation strategy

Develop a mid- and long-term strategy and argumentation line for negotiations

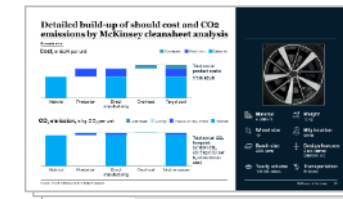


Buyer coaching

Build negotiation capabilities by simulating common scenarios and FAQs

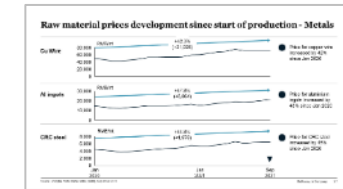


Lever-based fact packs



Commercial and technical ideas

Gain a view of product's CO2 emissions, and applicable decarbonization levers/actions



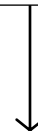
Detailed component and material-level

Consider specific part and material prices as part of negotiations



Supplier competitive landscape

Identify potential alternative suppliers and explore fulfillment of specific needs



Common negotiation of identified CO2 and cost saving potentials

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