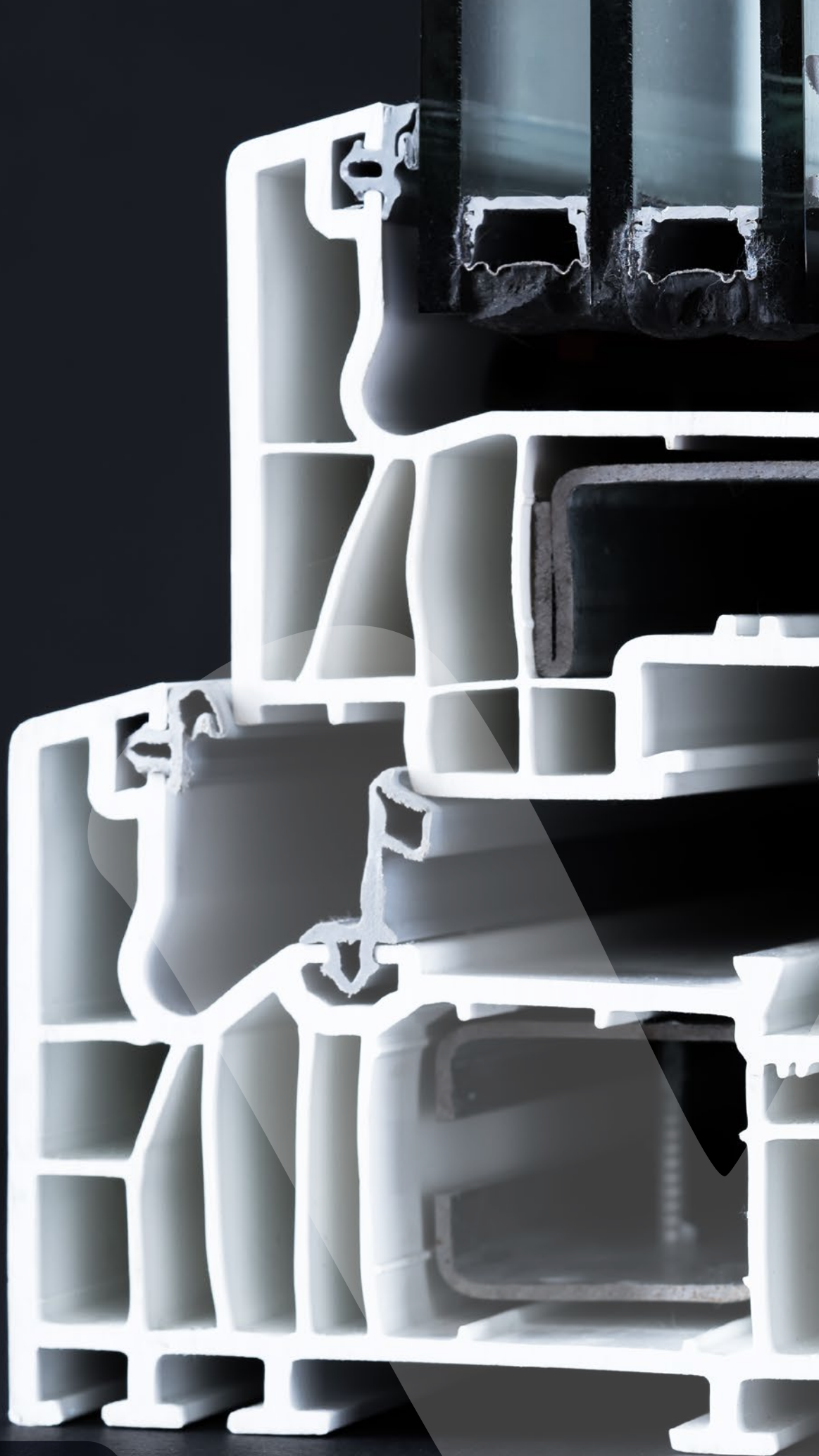


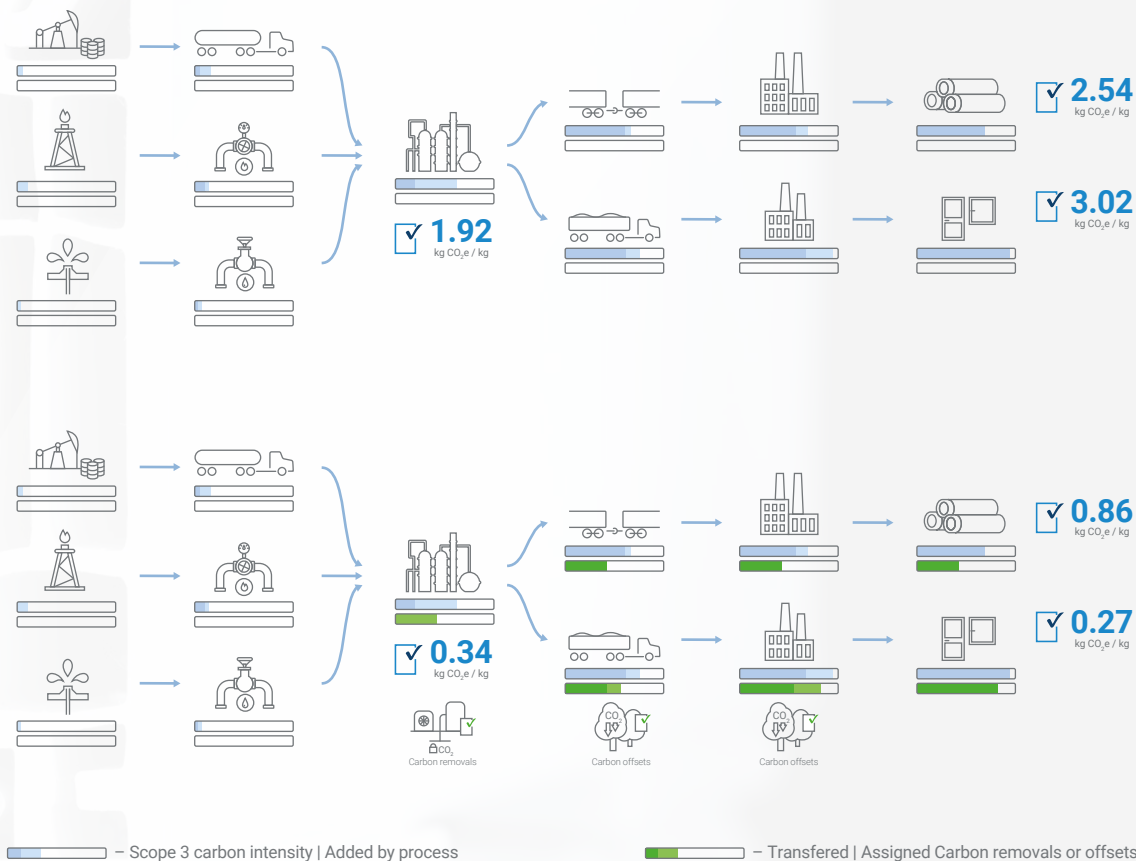


**Unlock high value
markets with product
level carbon
smart attestations**



Create product level carbon smart attestations to expand product margins.

Most of a product's carbon emissions are found in the value chain. Carbon accounting with CarbonSig shows the story of production by tracking carbon through any number of value chain interactions.



The CarbonSig platform **reduces** the **complexity** of supply chain data and internal value added processes, to **reveal** product level **carbon** for customer's, compliance and Net Zero strategies.

- Create premium low-carbon differentiated products & services.
- Strengthen customer relationships through transparency.
- Create visibility for upstream actors to see downstream products.
- Optimize procurement processes to drive sustainability goals.
- Simplify the patchwork approach to measuring and reporting carbon emissions.
- Create innovative solutions to greenhouse gas emissions.



CARBON SIG

- Inventory
- Process
- Libraries Management
 - Attributes
 - Objects
 - Reference LCI
 - Emission Standards
- Carbon Credits
- Units Management
- User Management
- Exception Management

Process Name: Cogeneration Power Plant
Description: Cogeneration facility providing process and heat loads.

Flow Diagram

```
graph LR; Water --> Cogeneration Power Plant; Natural Gas --> Cogeneration Power Plant; Cogeneration Power Plant --> High-Pressure Steam; Cogeneration Power Plant --> Low-Pressure Steam; Cogeneration Power Plant --> Electricity;
```

Inputs

Object Name	Units
<input type="checkbox"/> Water	gal (US)
<input type="checkbox"/> Natural Gas	cu.ft.

Outputs

Object Name	Units
<input type="checkbox"/> High-Pressure Steam	MWh
<input type="checkbox"/> Low-Pressure Steam	MWh
<input type="checkbox"/> Electricity	kWh

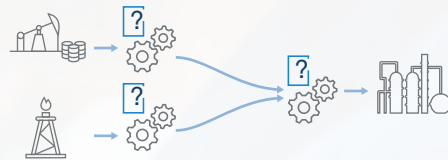
[Add Input](#) [Add Output](#)

Declare the carbon of any product or service.

CarbonSig technology allows you to link greenhouse gas emissions and the embodied carbon in your value chain to your products. Carbon credits can be assigned to products at any point in the value chain to help you and your suppliers better manage your product carbon footprints.



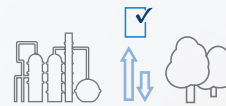
Grow the participation of intermediate good suppliers to create high-value, low-carbon products.



Request attested carbon information easily from upstream vendors.



Generate a digital twin to represent a product carbon footprint for compliance with government or voluntary regulations, carbon import levies, and low-carbon procurement programs.



Make product's carbon footprint a key part of sales conversation. Enter new markets with lower-carbon declared products.



Reduce your product's net declared carbon. Attach carbon credits or removals transparently to create new value-added carbon managed products and services.



Understand where your emissions come from. Take action to manage your carbon with energy efficiency and procurement actions.



Carbon footprint report
 Report ID: 123456789
 Report Date: 2023-10-27

Inventory
 Product: Toy plastic bricks
 Owner: Toys, Inc.
 Quantity: 200 kg

Declared emission

CO2e emissions	CO2e intensity
12 kg	0.06 kg CO2e/kg
32 kg	0.16 kg CO2e/kg

Net CO2e
 Net intensity: 0.06 kg CO2e/kg

Processes

Process	CO2e emissions (kg)	CO2e intensity (kg CO2e/kg)
Raw material extraction	10	0.05
Manufacturing	20	0.10
Transportation	2	0.01
Use of energy	10	0.05
Waste management	0	0.00
Total	42	0.21

Carbon footprint report
 Report ID: 987654321
 Report Date: 2023-10-27

Inventory
 Product: Toy plastic bricks
 Owner: Toys, Inc.
 Quantity: 200 kg

Declared emission

CO2e emissions	CO2e intensity
10 kg	0.05 kg CO2e/kg
22 kg	0.11 kg CO2e/kg

Net CO2e
 Net intensity: 0.05 kg CO2e/kg

Processes

Process	CO2e emissions (kg)	CO2e intensity (kg CO2e/kg)
Raw material extraction	8	0.04
Manufacturing	12	0.06
Transportation	0	0.00
Use of energy	2	0.01
Waste management	2	0.01
Total	24	0.12

Carbon footprint report
 Report ID: 567890123
 Report Date: 2023-10-27

Inventory
 Product: Toy plastic bricks
 Owner: Toys, Inc.
 Quantity: 200 kg

Declared emission

CO2e emissions	CO2e intensity
15 kg	0.075 kg CO2e/kg
25 kg	0.125 kg CO2e/kg

Net CO2e
 Net intensity: 0.075 kg CO2e/kg

Processes

Process	CO2e emissions (kg)	CO2e intensity (kg CO2e/kg)
Raw material extraction	12	0.06
Manufacturing	13	0.065
Transportation	0	0.00
Use of energy	2	0.01
Waste management	0	0.00
Total	27	0.135

Join the digital ecosystem for carbon management.

CarbonSig software as a service allows your business to confidently and accurately report your product's carbon footprint. Stay in compliance with industry best practices as standards evolve.

Get started fast.

No integration necessary. Sign up and start publishing product carbon footprints today using existing greenhouse inventory data. Record emissions declarations to a public registry to provide security, transparency, and immutability. CarbonSig supports any scale organization, tracking emissions from unlimited number of sites and assets.

Gather data from partners with ease.

Eliminate the complexity of calculating and sharing carbon intensity across product supply chains. Smart Attestation Certificates pass data seamlessly between organizations, linking together to show the entire production value chain. Suppliers not on CarbonSig? No problem; you can request emissions data straight from your suppliers by sending prebuilt forms.

Access large emissions factor database.

No supplier data - no problem. Start making footprints with reference data. Over time you can get more accurate supplier data and reduce measurement uncertainty. Fill in the emissions information gaps with data from our large built-in emissions factor database. Customize the database with your own emissions factors or import them from a third-party provider.

Reduce your product's net declared carbon.

If acceptable to compliance regimes or downstream offtakers, use carbon credits or removals to any product or service. As raw materials are turned into end consumer goods and services, the declared emissions and credits associated with these upstream goods are accounted for transparently in the end products.

Product carbon attestations can be recorded on a public registry.

CarbonSig product emission reports are immutably recorded. Linked product reports form a digital twin of real-world value chains. Reports are compliant with globally recognized environmental product declaration standards. Display any third-party validation or certification directly on the Smart Attestation Certificate.

Visualize carbon emissions across any supply chain.

Heatmap where emissions occur within complex interactions, from bill of materials to utilities to other energy inputs. Show how much of your product's carbon comes from your upstream value chain. Manage inputs and processes more effectively to deliver your sustainability goals.



carbonsig.com