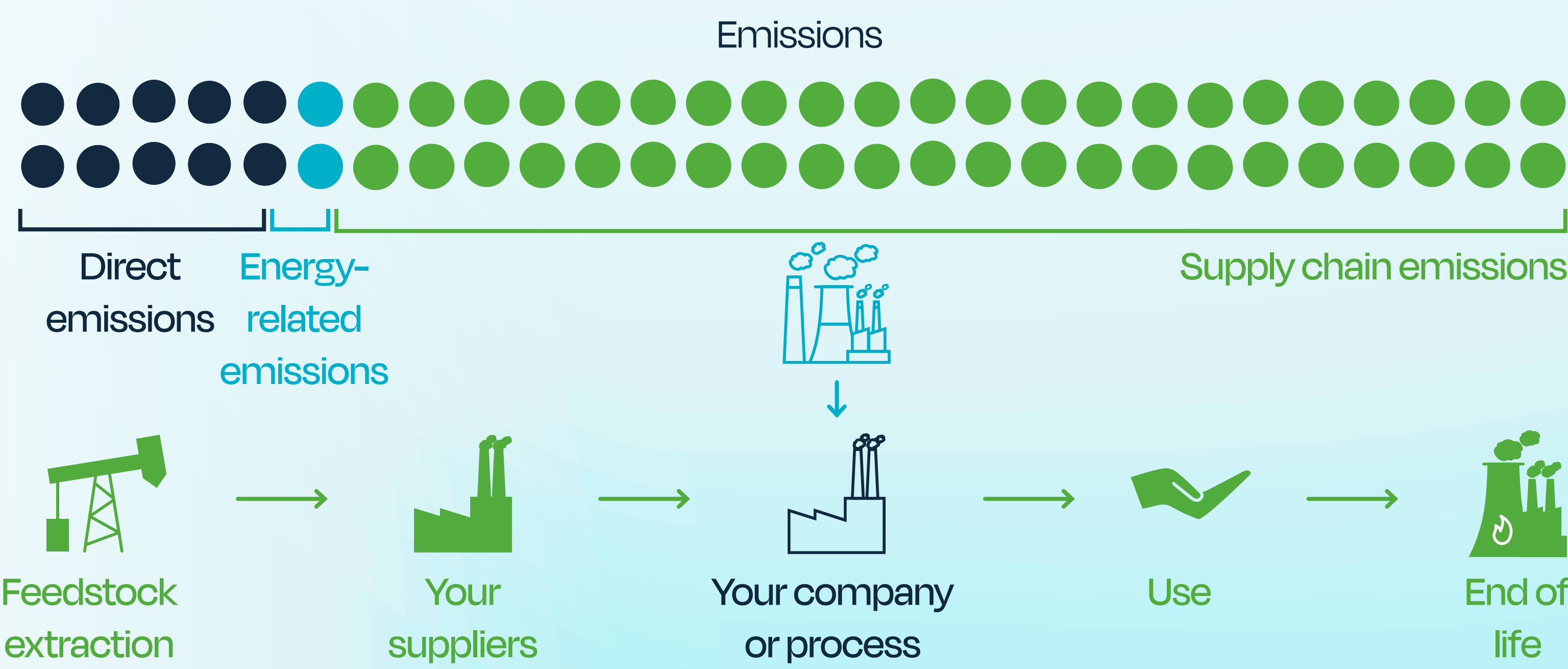


HOW TO *REDUCE* SCOPE 3 EMISSIONS FOR CHEMICALS AND PLASTICS USING HIGHLY SPECIFIC LCA DATA

IMPORTANCE OF PURCHASING DECISIONS

The largest part of a company's carbon footprint comes from the supply chain.



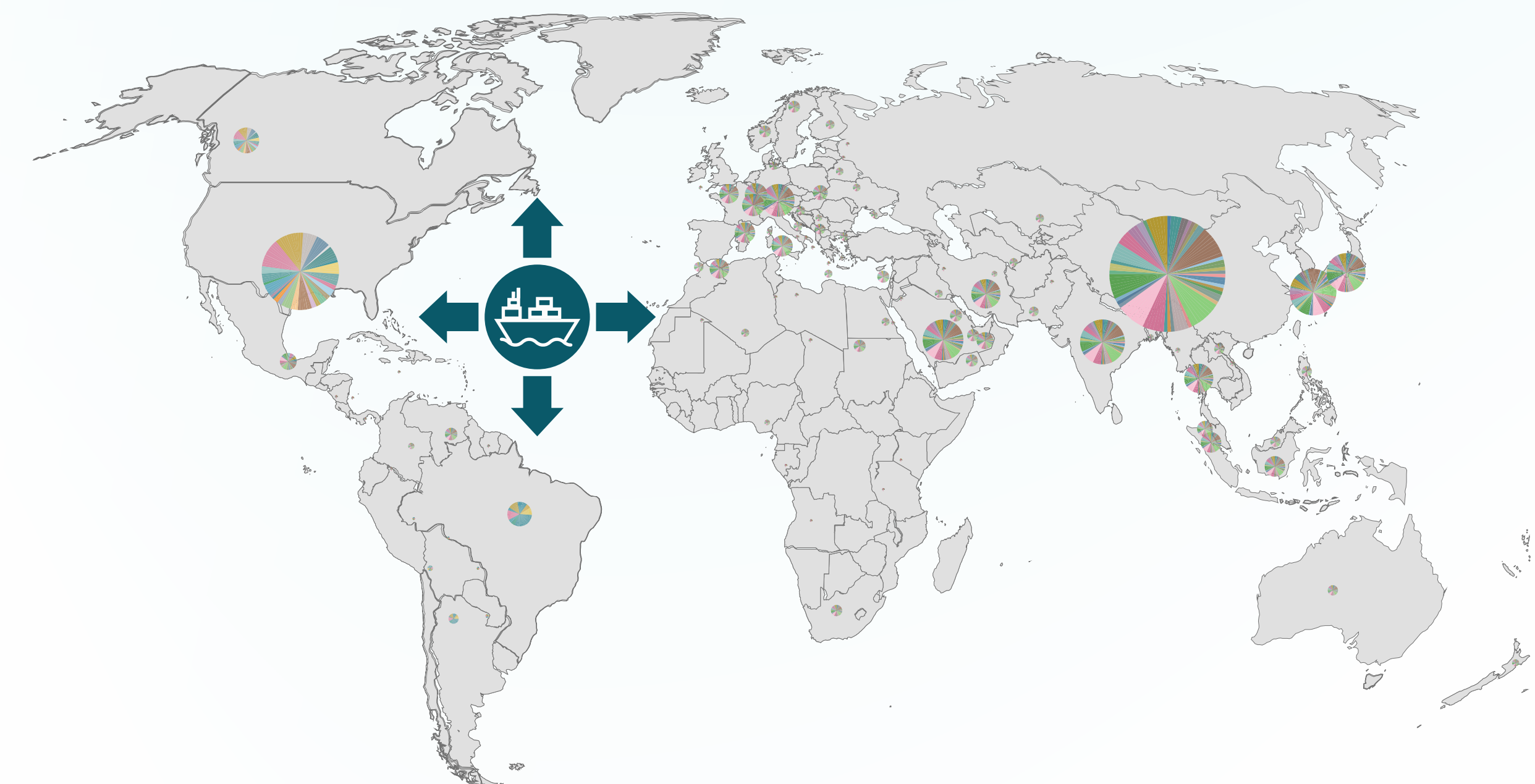
LARGE DIFFERENCES IN CARBON FOOTPRINTS

...for the same chemical sourced from different suppliers, due to different:

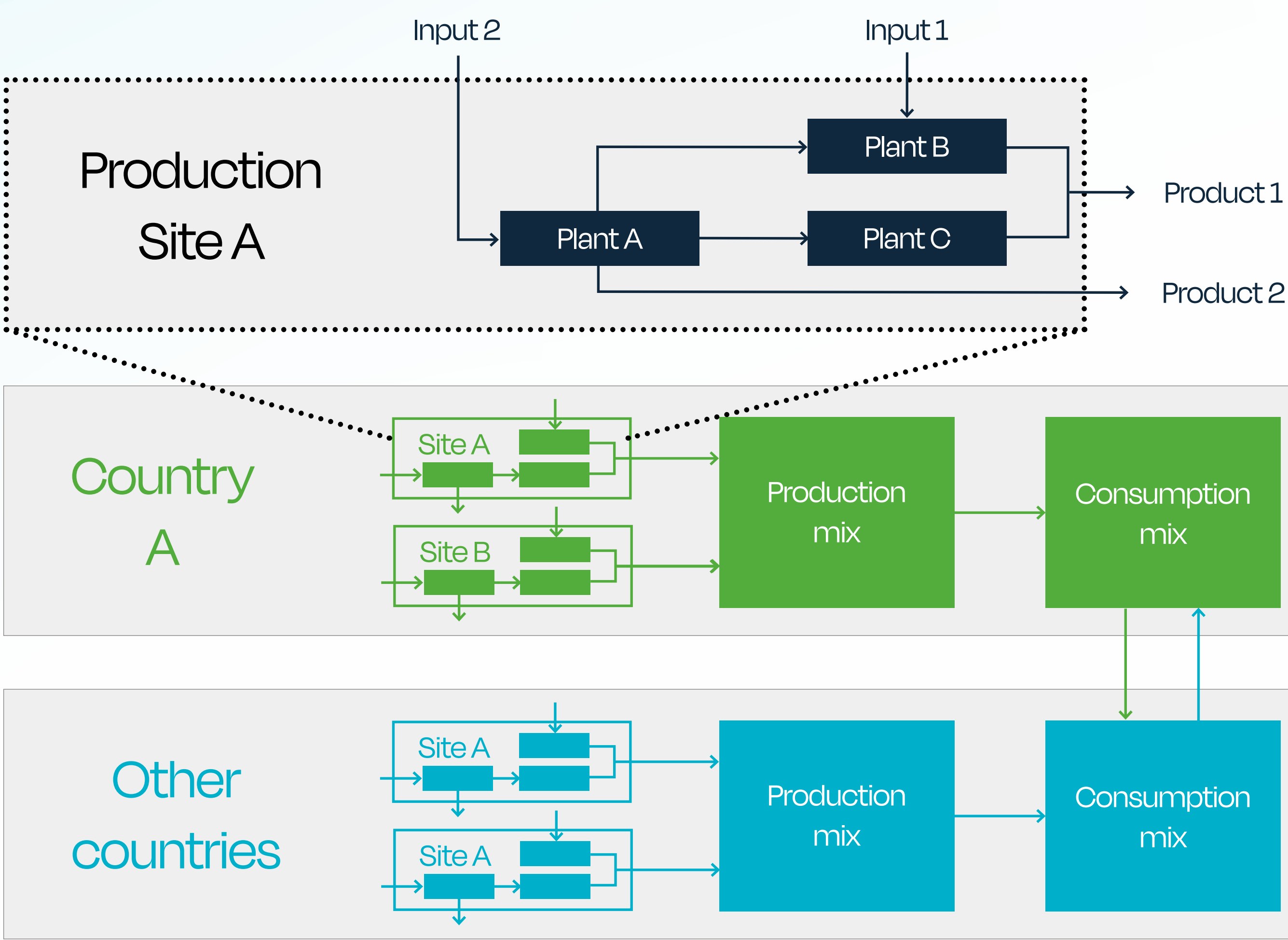


CARBON MINDS' MODELING APPROACH

... allows us to understand the differences in carbon footprints along entire production chains.



Connecting market data, technical data, and trade data to track chemicals throughout the global economy.



From plant-level data over integrated production sites to country-level data.

FINDING REDUCTION OPTIONS

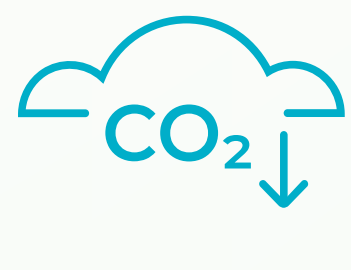
Example: Propylene



Identify differences in environmental impacts between countries...

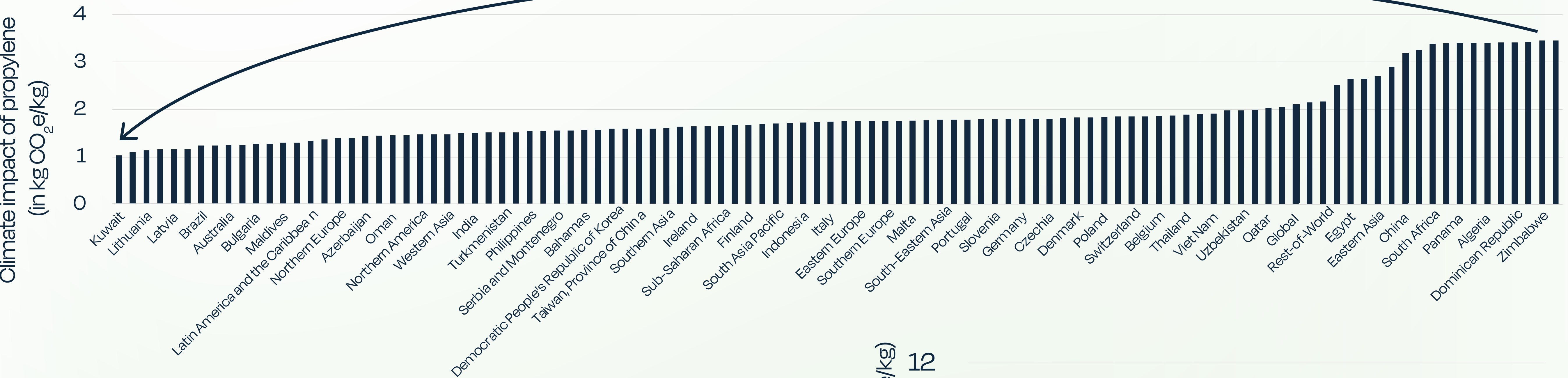


... explore differences between technologies



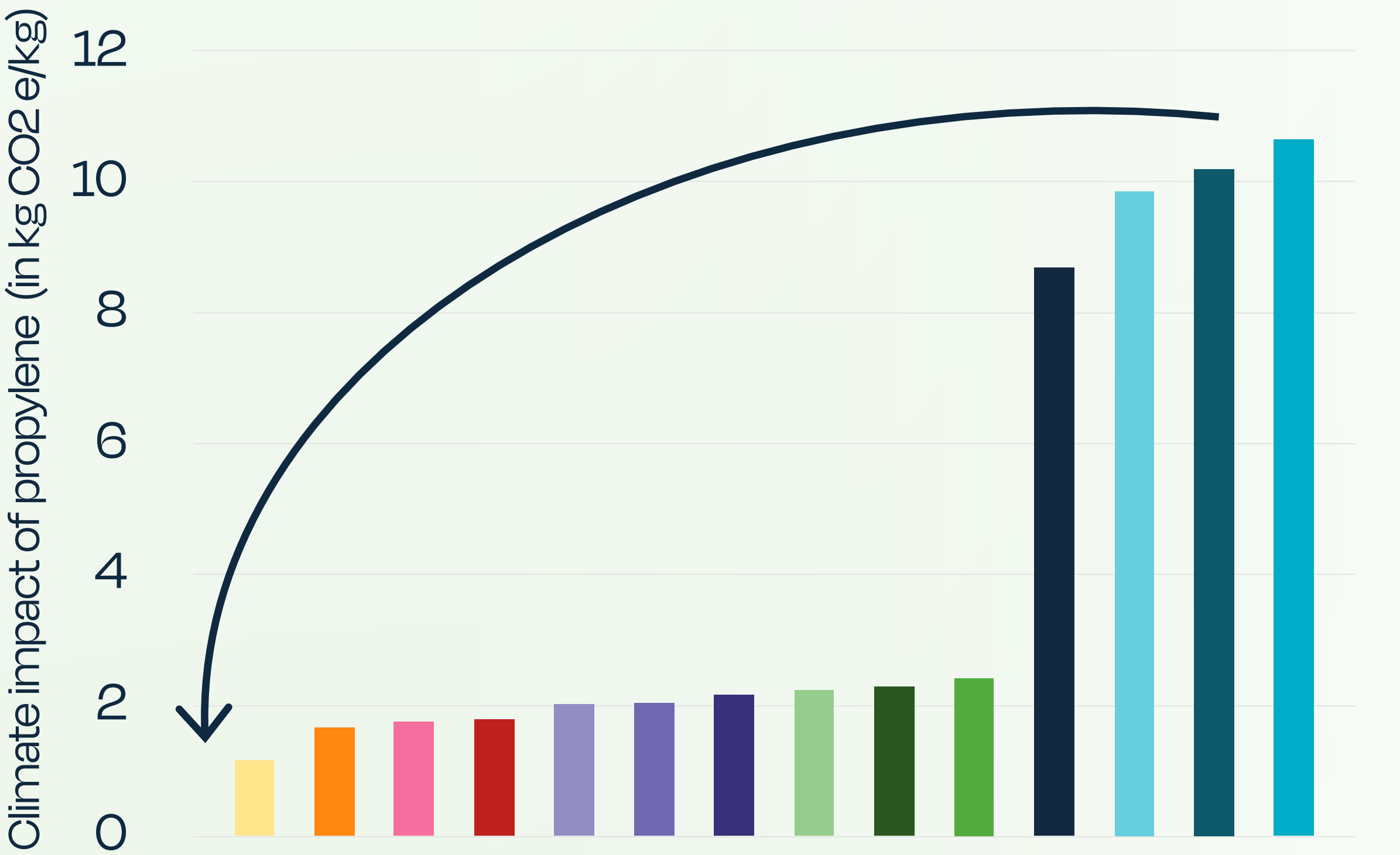
Find reduction opportunities

Differences between regions



Differences between technologies (example China)

- fluid catalytic cracking of vacuum gas oil China
- steam cracking of naphtha China
- deep catalytic cracking of vacuum gas oil China
- steam cracking of ethane China
- steam cracking of LPG China
- dehydrogenation of propane (CATOFIN) China
- dehydrogenation of propane (average process of 3% UHDE, 39% Catofin, and 58% Oleflex) China
- dehydrogenation of propane (OLEFLEX) China
- steam cracking of atmospheric gas oil China
- metathesis of C4 China
- methanol to olefins (UOP/HYDRO) process China
- methanol to propylene (MTP Lurgi) process China
- methanol to olefins (DMTO) process China
- methanol to olefins (22% UOP, and 78% DMTO) average process China



CONCLUSION



Supply chain emissions can be reduced through purchasing decisions



Specific data is key in identifying reduction options and taking action

HOW TO ACT?



Engage your current suppliers about their emissions and reduction options using high-quality data



Change suppliers to systematically reduce your supply chain emissions

Looking for highly specific **LCA DATA?**

Reach out to us.