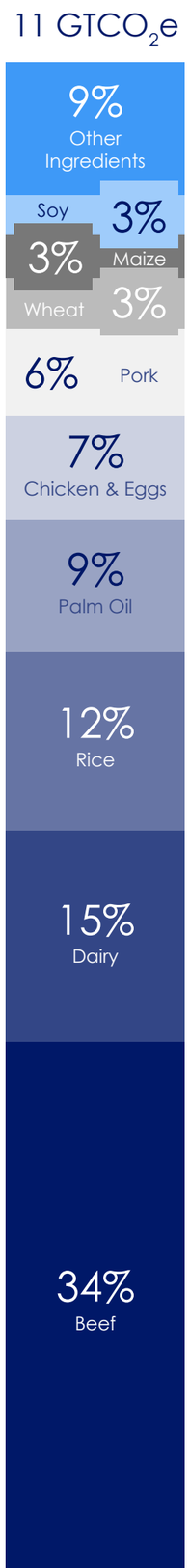

ACTION 1: FOCUS ON KEY EMISSIONS HOTSPOTS

As *Graphic 3* shows, the production of only nine commodities accounts for 90% of total land-based emissions worldwide from food supply chains. All nine fall into three categories: meat and dairy; tropical commodities, like palm oil; and heavily fertilized grains. Six regions – US, Brazil, China, India, Indonesia and the EU – drive 50% of the consumption of these highest-emitting commodities.*

This concentration of emissions from particular products and regions makes it feasible for companies to identify their individual emissions hotspots and concentrate on reducing emissions from them. Focusing on the 'big bets' that matter can help companies gain traction on their Scope 3 emissions in the short term.

Developing and implementing successful net zero strategies requires companies to engage with decision-makers along entire 'hotspot' value chains, right down to the first link in the chain: the farmers. Companies need to track and trace emissions accurately along the chains to understand the risks, costs and potential returns of alternatives for reducing them and ensure all players co-operate.

Companies can start this process by prioritizing suppliers and traders for engagement, possibly those with whom they have had the longest relationships or for whom they are a major customer. Companies that are particularly large buyers of specific ingredients may choose to take a lead on setting net zero procurement standards and specifying cultivation practices that competitors with less purchasing power can follow.

Various companies have already started this kind of cooperation with farmers and suppliers – at least to a limited extent. Some are helping farmers to shift to more climate-friendly and regenerative practices. They are piloting different practices in multiple regions because, as noted above, the most appropriate and effective practices may differ widely by crop and location. For example, General Mills and Pepsico have recently announced a range of initiatives with farmer associations and other partners to pilot and scale regenerative agricultural practices. Such programs bring together local agronomical expertise and farmers on the scale needed for transitions to take hold. To incentivize such transitions, food companies could reach long-term off-take agreements with farmers and suppliers to help them access the financing they need.

**Food and Land Use Coalition, paper forthcoming*

Graphic 3: Global emissions breakdown by food commodity

GHG emissions (CO_2e)

Sources: *Food and Land Use Coalition analysis, paper forthcoming*

ACTION 2: SELECT THE OPTIMAL MIX FOR YOUR NET ZERO RECIPE

Getting to net zero will require transformative shifts in every global food company's strategy and operations. As for any corporate transformation, each company needs to strike a balance between cost, opportunity, risk and aptitude for change (a combination of corporate will and ability) to make the right adjustments to its portfolio and operating model.

To tailor a corporation's 'net zero recipe' to its specific emissions profile and aptitude for change, a company can draw on three emissions-cutting 'ingredients': technical levers, product reformulations and portfolio mix, and nature-based levers *(see Graphic 4)*

Graphic 4: Three ingredients for a corporate net zero recipe

	1. Technical levers	2. Product Reformulation & Portfolio Mix	3. Nature-based levers
What?	Emissions reductions initiatives in manufacturing and supply chain that deploy decarbonization technologies and solutions	Reducing emissions by making changes to the products or shifting the product portfolio	Sourcing ingredients that are produced through techniques that help store carbon
Levers	Packaging Sustainable Manufacturing Green Logistics	Lower-impact ingredients substitutions & novel ingredients Focus growth towards low-carbon products Deprioritize / phase out of high-carbon products	Regenerative agriculture practices to sequester carbon (e.g., cereal crops) Agroforestry practices (e.g., for coffee) Nature-based solutions within the value chain (e.g., land restoration)
How?	Delivered by technical teams (procurement, packaging, manufacturing, logistics) Action can start today when cost implication understood	R&D / technical teams can begin some reformulation action today, following value engineering approach Significant formulation change and growth mix changes require a process of exploration and alignment with strategy teams, category / regional leads	Sourcing sustainable commodity supply where effective protection and impact generation can be guaranteed Deploying farming practices with key farmers and suppliers

Source: *Systemiq Analysis*