# Ideate improvements and prioritize

Percent $CO_2$ generation for each step in the life cycle based on demands for coffee from each farm

South American Farms ←——————→ Finland

| 50.6 % | 0.8 % | 3.0 % | 2.6 % | 5.7 % | 0.7 % | 2.4 % | 0.2 % | 1.7 % | 11.9 % | 20.3 % |
|---|---|---|---|---|---|---|---|---|---|---|

| Plant & Fertilize | Irrigate | Lime | Harvest | Primary Processing | Mill | To Finland | Roast | Package | Grind & Brew | Drink & Dispose |

(007) Address the carbon footprint of disposable cups

(002) Pursue Carbon offset strategy

Coffee Footprint
78 Kg/Year
(per person)

(005) Use Better seeds, to reduce fertilizer

$CO_2$ emissions per Liter of coffee

## Brazil Farm 2: Life Cycle $CO_2$ Emissions in Kg per Coffee Liter

Ladder Chart

Brazil Farm 2: Life Cycle Emissions in Kg per Coffee Litre

| 0.0 | 0.1 | 0.2 | 0.3 | 0.4 | 0.5 | 0.6 | 0.7 |

Plant & Fertilize · Irrigate · Lime · Harvest · Process · To Finland · Package · Grind & Brew · Drink & Dispose

0.73

(004) Reduce packaging with reusables

(001) Reduce the estimated 30% of coffee that is wasted at consumption end today

| Brazil Farm 1 | 0.42 kg/ltr |
| Brazil Farm 2 | 0.73 kg/ltr |
| Colombia Farm 1 | 0.61 kg/ltr |
| Honduras Farm 1 | 0.33 kg/ltr |
| Nicaragua Farm 1 | 0.39 kg/ltr |
| Nicaragua Farm 2 | 0.29 kg/ltr |
| Nicaragua Farm 3 | 0.30 kg/ltr |
| Nicaragua Farm 4 | 0.46 kg/ltr |

## Nicaragua Farm 2: Life Cycle $CO_2$ Emissions in Kg per Coffee Liter

Ladder Chart

Nicaragua Farm 2: Life Cycle Emissions in Kg per Coffee Litre

| 0.00 | 0.05 | 0.10 | 0.15 | 0.20 | 0.25 | Kg/Ltr 0.30 |

Plant & Fertilize · Harvest · Process · Mill · To Finland · Package · Grind & Brew · Drink & Dispose

0.29

(003) Benchmark best practices across farms

(006) Promote coffee farm products with higher sustainability

### Kaizen Impact Matrix

Impact On Value (y-axis: 1–5)
Ease Of Implementation (x-axis: 1–5)

Kaizen Bursts

(001) Reduce the estimated 30% of coffee that is wasted at consumption end today

(002) Pursue Carbon offset strategy

(003) Benchmark best practices across farms

(004) Reduce packaging with reusables

(005) Use Better seeds, to reduce fertilizer

(006) Promote coffee farm products with higher sustainability

(007) Address the carbon footprint of disposable cups

Kaizen Impact Matrix

eVSM