Procurement Resource | claight

CLIMATE × COMMODITY RISK · 2026–27

The El Niño Procurement Monitor

Where global supply tightens, how far prices move, and what buyers should do before the 2026–27 event peaks.

97-98%
El Niño Persists
(As Of June 2026)

10+
Commodities At Risk

$32-$96 Billion
Prior – event Direct Loss
(1997-98 El Niño)

EXECUTIVE SUMMARY

What Buyers Need to Know

01 El Niño Is Established And Forecast To Intensify

El Niño established, forecast to intensify into the OND–DJF peak · ~99% persistence (*IRI)* · 63% very-strong / super intensity at the NDJ peak (*NOAA CPC*) · Niño 3.4 +1.7°C and rising

02 Impact Is Uneven , Winners And Losers By Commodity

Palm oil, cocoa, sugar, rice and rubber carry the highest exposure. Some tighten sharply; others sit on surplus. Position-by-position analysis matters more than a blanket view.

03 Second-order Costs Compound The Shock

Drought-hit waterways and hydropower-driven processing-energy costs stack onto crop losses lifting landed costs even where harvests hold. Crude and fertilizer spiked on the spring 2026 Hormuz crisis, then retraced: exogenous, but a live volatility risk.

04 The Window To Act Is Now.

Disruption peaks **Q4 2026–Q1 2027** . Forward cover, supplier diversification and freight contingency are most valuable before the market fully prices the event.

Sources: NOAA CPC, IRI

SECTION 01 · THE SETUP

El Niño, Defined

A recurring warming of the central & eastern Pacific that reshapes rainfall across the tropics and with it, the world's crop belts.

MEASURE

ONI ≥ +0.5°C

Sea-surface temperature anomaly in the Niño 3.4 region, sustained over five overlapping 3-month seasons.

FREQUENCY

Every 2–7 yrs

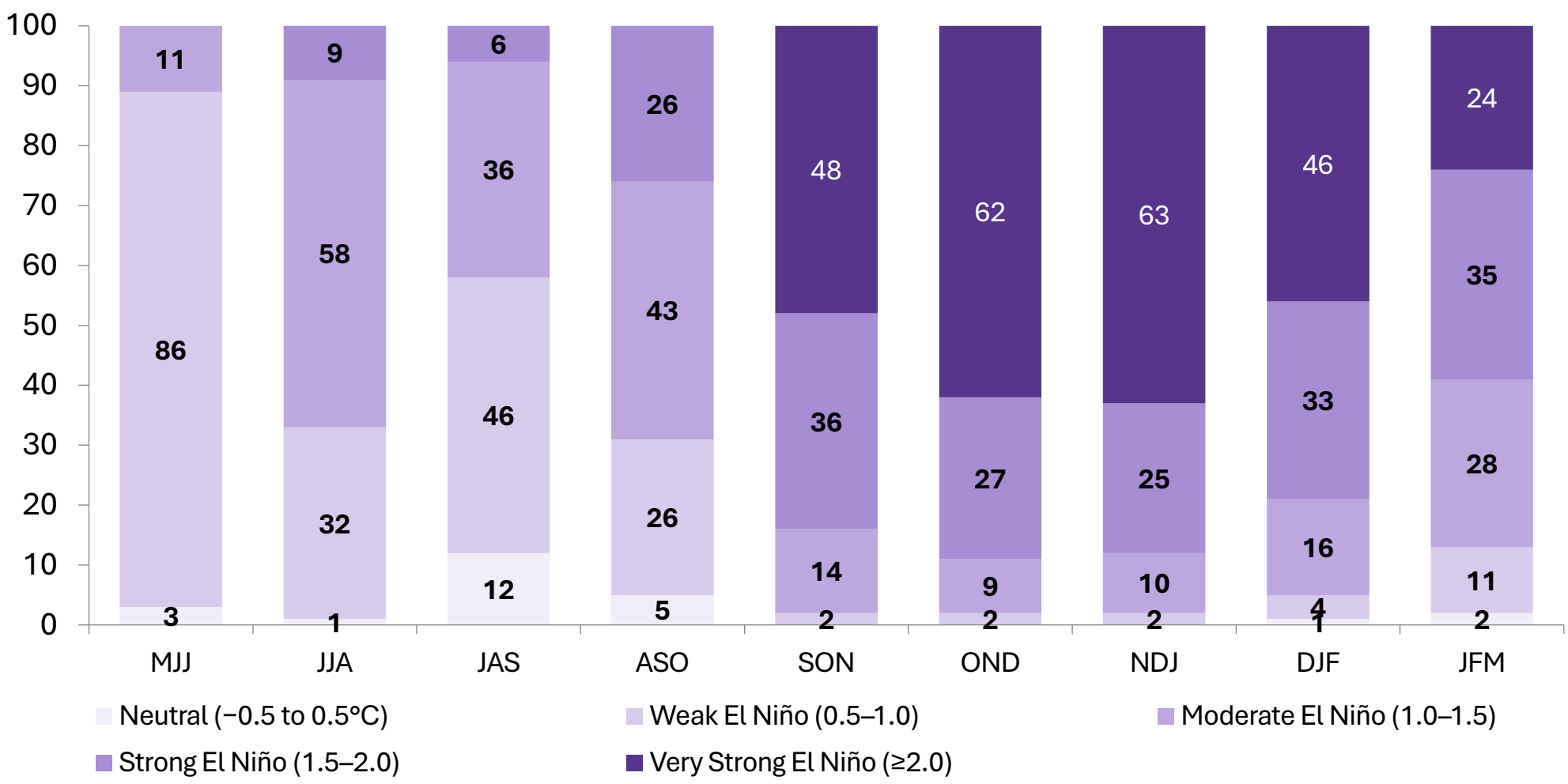
Each episode typically lasts 9–12 months, peaking in the Northern-Hemisphere winter.

2026 STATUS

Strong

Niño 3.4 at +1.7°C (June 2026), in the strong range and rising; forecast to intensify toward a very-strong peak (63% super, NOAA CPC).

NOAA CPC ENSO Strength Probabilities : issued June 2026



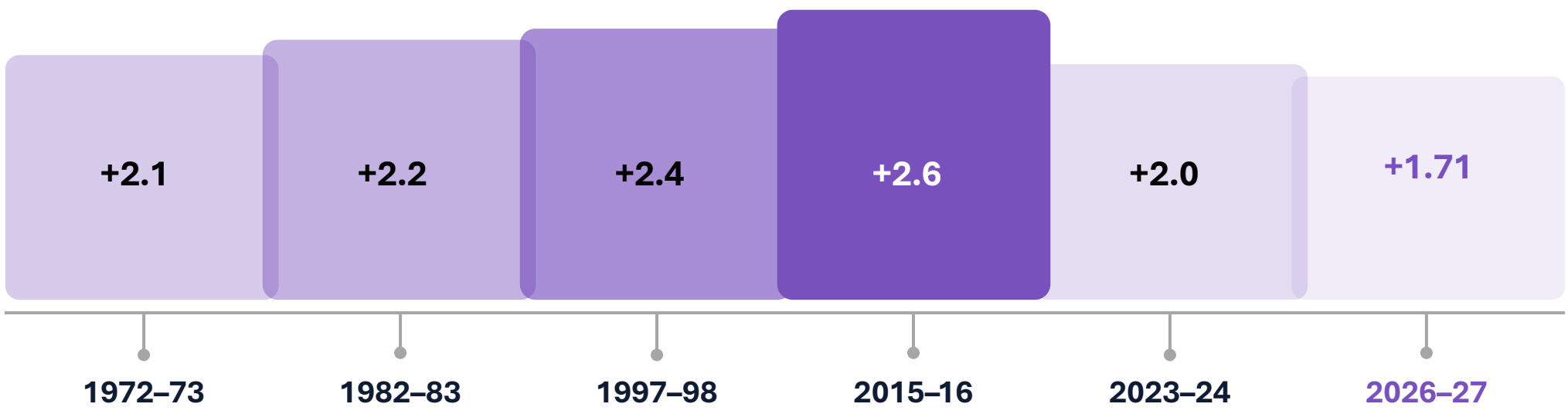
Commodities At Risk · 2026 Palm Oil · Cocoa · Rice · Sugar · **Wheat**

Sources: NOAA, IRI

Historical Strong El Niño Analogs

Every strong event has rewritten commodity balances the same inputs recur, via yield loss → price spike → substitution.

Relative Peak Intensity (Oni, °C)



Episode	Commodities Affected	Signature Impact
1972–73	Fishmeal · Wheat · Corn · Palm Oil · Rice · Soybean	Anchoveta collapse → structural feed shift to soybean
1982–83	Grains · Oilseed · Copper · Cocoa · Fishmeal	Broad-based surge across soft & industrial commodities
1997–98	Palm Oil · Maize · Cocoa · Wheat · Fishmeal	$32–96B losses — the benchmark super-event
2015–16	Sugar · Maize · Rice · Wheat · Palm Oil	Palm output cut in SE Asia; 15% Brazil cocoa mortality
2023–24	Rice · Palm Oil · Cocoa · Wheat· Sugar	Cocoa & sugar records; Panama drought lifted freight

MOST RECURRENT

Palm Oil · Cocoa · Fishmeal

CONSISTENT MECHANISM

Yield Loss → Price Spike → Substitution

Note: 1. 2026-27 Value Is June 2026 Weekly Niño 3.4, Not Final Event Peak. Peak ONI Per NOAA CPC, 3-month Running Mean.

Sources: NOAA, FAO 2015–16 report, USDA, World Bank Commodity Markets Outlook, ECB, Banco de España

The 2026 Risk Map

Crops most exposed to the coming event, ranked by risk and the producing geographies in the drought path.

● High Risk

- Palm Oil
- Sugar
- Cocoa
- Rice
- Coffee
- Rubber
- Coconut Oil

● Moderate–high

- Wheat
- Maize
- Oilseeds
- Cotton

● Moderate

- Barley
- Sorghum
- Canola
- Pulses
- Soybean
- Fishmeal

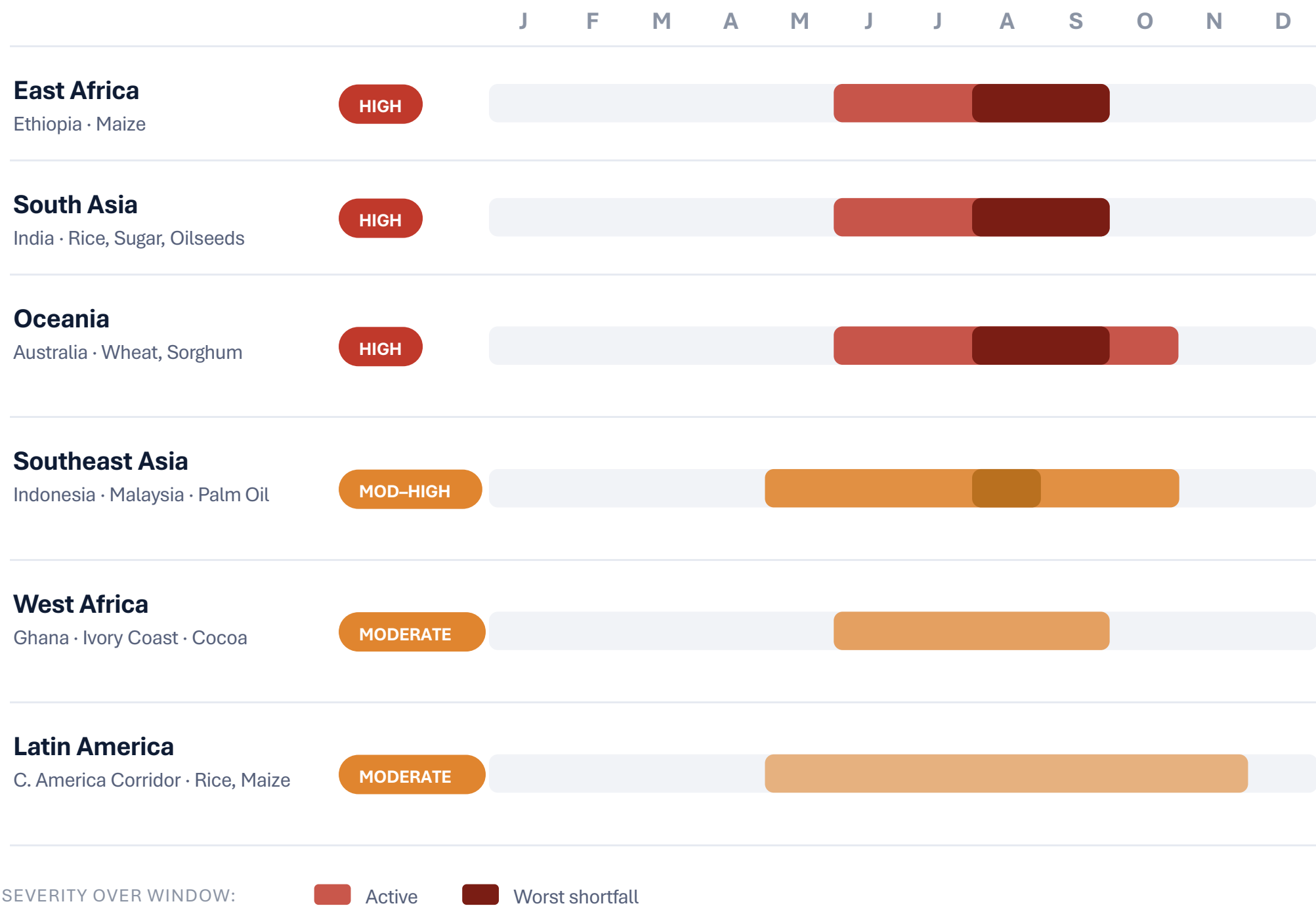
Producing Geographies In The Drought Path

South East Asia	South East Asia & Oceania	Africa	Americas
Indonesia	India	Ethiopia	North & South Brazil
Malaysia	Australia	Ghana	C. America Corridor
Thailand		Ivory Coast	Peru
Philippines		Zimbabwe	Southern US
Vietnam		Zambia	
		South Africa	

Sources: FAO,NOAA,GOVPH,European Commission, Reuters, Fitch Ratings, Relief web, Asia news, Vietnam Coffee United

Drought Zones in Focus

When each region feels the squeeze and which crops sit in the firing line.



The Aug – Sep Pinch

East Africa, South Asia and Oceania hit worst shortfall in the same eight weeks alternate origins get bid up simultaneously. Qualification done in July is worth more than contracts signed in October.

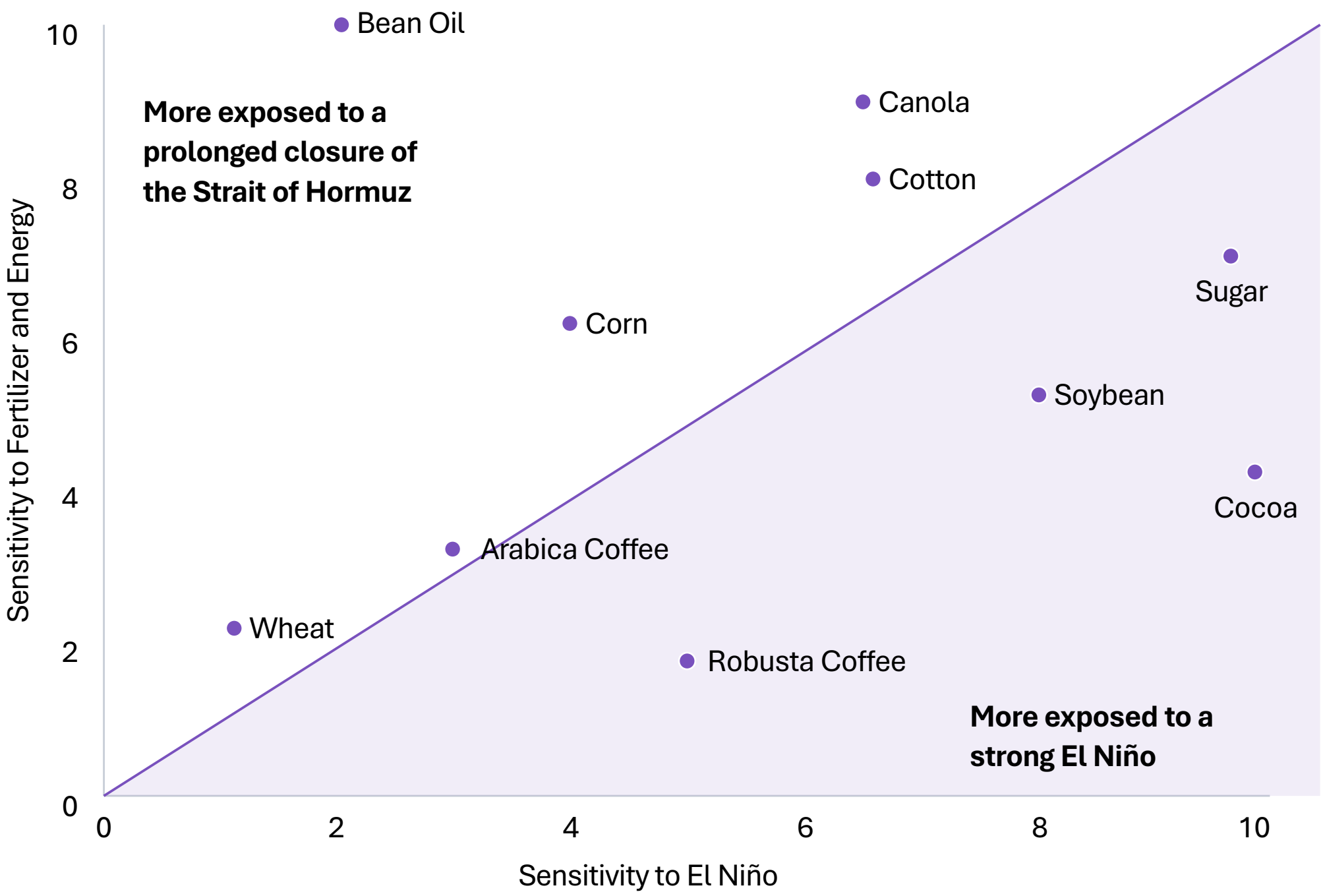
The Long Tail

Latin America's window runs latest into Q4 meaning rice and maize relief from the Americas arrives only after Asian shortfalls have already priced.

Sources: NOAA, GOVPH, NOAA CPC, PAGASA, IMD, Reuters, FAO, ABARES, PR Regional Desk

The El Niño Crosshairs

Commodity sensitivity to El Niño vs. a Strait of Hormuz closure where each input's real risk lies.



Two Risks, Two Playbooks

Sugar, cocoa and robusta are climate trades hedge with forward cover and origin diversification. Bean oil, canola and cotton are energy trades hedge with freight and input-cost clauses

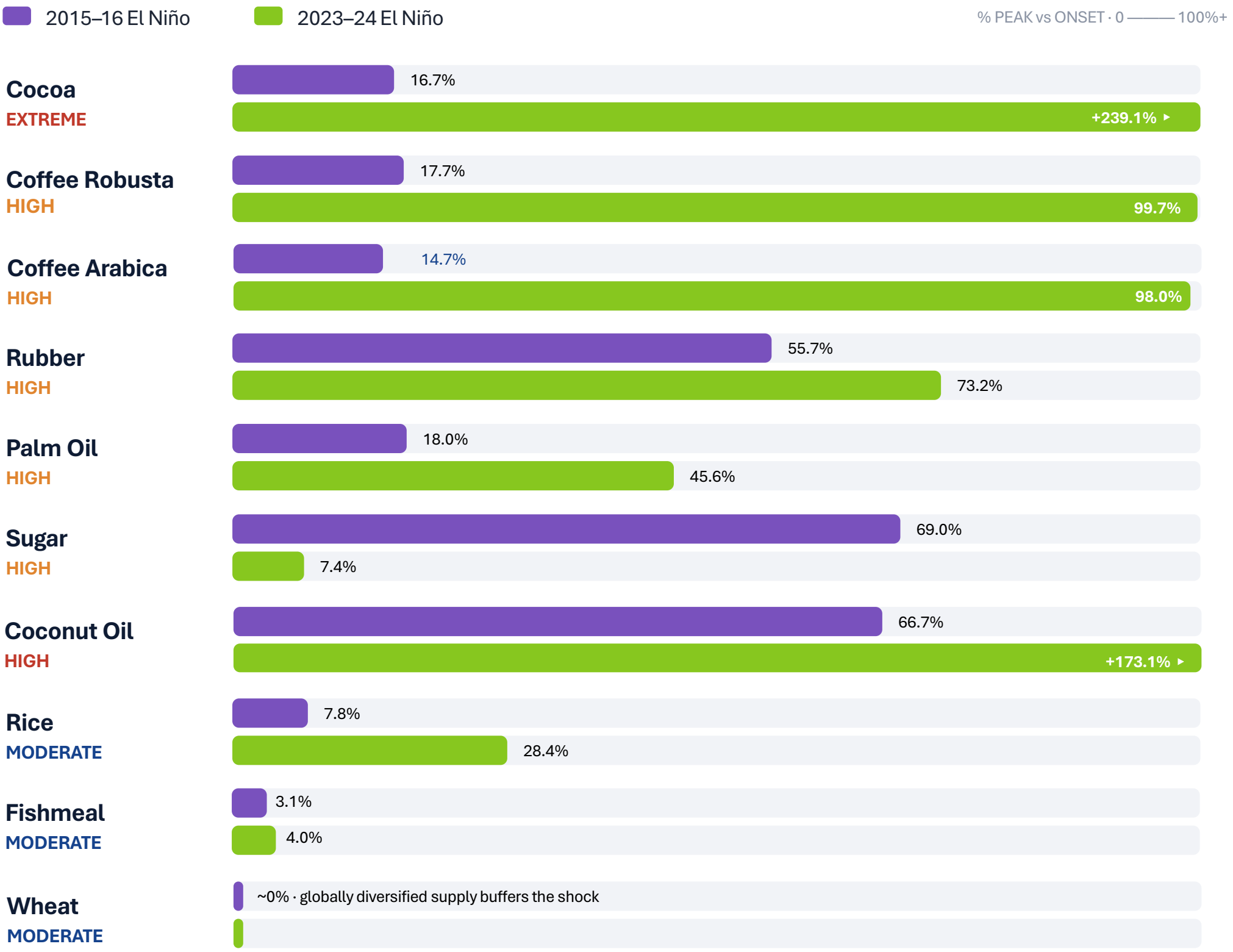
The Dual-exposed Middle

Corn and soybean sit in both crosshairs yield risk and fertilizer pass-through compound. Budget these on landed cost, not farmgate price.

Sources: Neuberger Berman Group, FAO, GOVPH, European Commission, Asia news, Vietnam Coffee United

Where Prices Move

Agricultural & soft commodities onset-to-peak price move in the last two El Niño events.

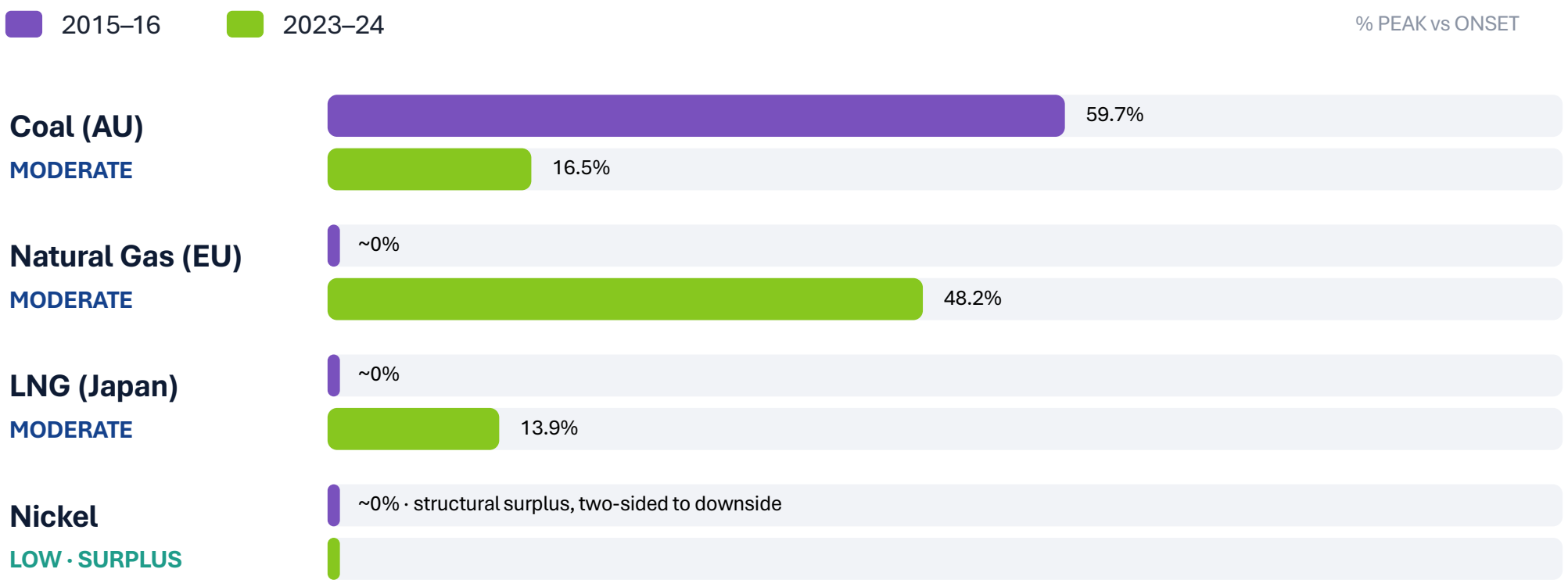


Note: historical moves reflect El Niño alongside other concurrent drivers disease pressure, export policy, currency, energy costs and inventory. Cocoa's +239% (2023–24) and sugar's +69% (2015–16) both had significant non-climate contributors. Methodology: onset = first sustained 3-mo ONI/RONI ≥ +0.5°C per event; peak = highest monthly-average price in the window (Procurement Resource, World Bank Pink Sheet, exchange data).

Sources: World Bank Pink Sheet, J.P. Morgan, ICCO

Industrial, Metal & Energy

Beyond the fields how metals and energy carriers moved, and the one El Niño genuinely tightens.



EL NIÑO-EXPOSED · ALREADY TIGHT

Copper · ~$13,552/MT (World Bank: June 2026)

Copper is among the industrial metals most exposed to El Niño as any reduction in supply from flooding in Peru or Chile two of the world's biggest producers adds to already-tight conditions. Copper set all-time highs earlier in 2026 $6.71/lb on COMEX (13 May) and $14,527.50/MT on the LME (29 Jan) and has since eased to ~$13,552/MT in June 2026

SUPPLY RISK

Chile/Peru floods & mudslides; Zambia drought + hydropower shortfall. Morgan Stanley: copper the metal most at risk from El Niño.

DEMAND PULL

Structurally strong the data-centre boom and the electrification of everything.

NET

Market already in deficit an El Niño supply hit could "supercharge" the price.

Note: LME spot reflects both El Niño supply risk and COMEX–LME divergence driven by US Section 232 tariff pre-positioning

Sources: Forbes, Morgan Stanley, LME, World Bank Pink Sheet (Jun 2026), NOAA CPC

The Commodity Risk Board

Current price, 2026–27 El Niño risk and supply trajectory one view across the basket

Commodity	Price	El Niño Risk	Current Supply	Forecast
Agricultural				
Cocoa	$4,400/Mt	**Extreme**	**Surplus**	**Two-sided**
Coffee Robusta	$3,730/MT	**High**	**Balanced**	**Two-sided**
Coffee Arabica	$6,790/MT	**High**	**Balanced**	**Two-sided**
Sugar	$320/MT	**High**	**Surplus**	**Tighten**
Rice, Thai 5%	$494/MT	**Moderate**	**Surplus**	**Tighten**
Wheat, US HRW	$286/MT	**High**	**Surplus**	**Balanced**
Rubber	$2,860/MT	**High**	**Deficit**	**Tighten**
Oil				
Palm Oil	$1,105/MT	**High**	**Balanced**	**Tighten**
Coconut Oil	$1,979/MT	**High**	**Balanced**	**Tighten**
Metals				
Copper	$13,552/MT	**Moderate**	**Deficit**	**Tighten**
Nickel	$17,588/MT	**Low**	**Surplus**	**Surplus**

Note:

1. Prices are as of June 2026 – published by World Bank (as of 02 July 2026)
2. Outlook is two-sided — current surplus constrains upside, but a very strong El Niño event would reverse this rapidly via major crop damage
3. Vietnam's 2025/26 Robusta recovery to 31.7M bags eases near-term supply, but El Niño-driven drought in the Central Highlands threatens the 2026/27 crop — irrigation water shortages already flagged
4. Brazil's record 2026/27 crop of 66–76M bags eases near-term supply, but harvest running 52% complete vs. 60% average (Safras & Mercado, Jul 2026) pushes flowering into peak El Niño window (OND 2026), threatening the 2027/28 crop

Sources: LME, World Bank Pink Sheet, ANRPC, USDA FAS, Reuters

The Commodity Risk Board

Current price, 2026–27 El Niño risk and supply trajectory one view across the basket

Commodity	Price	El Niño Risk	Current Supply	Forecast
Energy				
Coal	$139/MT	**Moderate**	**Balanced**	**Balanced**
Natural Gas, EU	$15/MMBtu	**Moderate**	**Balanced**	**Balanced**
LNG, Japan	$13/MMBtu	**Moderate**	**Balanced**	**Balanced**

ALSO WATCH · **Emerging Exposure Not Yet Fully Modelled, Monitor For 2026-27**

DAIRY

Whole Milk Powder

New Zealand

NZ drought cuts pasture yields; SE Asia herd heat stress raises feed costs. Compound pass-through hits every FMCG buyer

MODERATE

PRODUCE

Bananas & Shrimp

Ecuador / C. America

El Niño flips Ecuador to flooding Fusarium banana disease and shrimp EMS spike. Different mechanism from drought; currently unpriced by most buyers

MODERATE

BEVERAGES

Tea

Kenya / Sri Lanka

Rainfall sensitivity during growing season disrupts black tea yields. Kenya and Sri Lanka together supply ~40% of globally traded tea. Relevant for beverage buyers

MODERATE

Sources: LME, World Bank Pink Sheet, ANRPC, USDA FAS, Reuters, GDT

El Niño on the Waterways

Low water is a second supply shock draining the rivers and canals that carry the harvest.

Reduced Precipitation → **River Levels ↓** → **Shipping Capacity ↓** → **Rerouting & Surcharges** → **Commodity Prices ↑**

Panama Canal

HIGH

CENTRAL AMERICA

PEAK DISRUPTION · Q1 2027

−40%
throughput, 2023–24

49.5 ft
neopanamax draft cut, eff. July 2026

Slot-auction costs trebled to ~$400k; priority bookings hit $4m. Hapag-Lloyd added a $500/container surcharge in 2024. **Buyer impact: container surcharges + extended lead times.**

Rhine

HIGH

EUROPE

PEAK DISRUPTION · Q4 2026

8×
freight-rate spike, 2022

80%
of German inland freight

In 2022 rates ran €5→€40/t (Rotterdam–Karlsruhe) and stayed below critical for 60 days; BASF Ludwigshafen curtailed output. **Buyer impact: chemical & industrial supply delays in Europe.**

Amazon

MODERATE

SOUTH AMERICA

PEAK DISRUPTION · Q3-Q4 2026

40–50%
capacity loss, 2023–24

122 yr
Manaus port low (Oct 2024)

Madeira River cargo fell 60%; Maersk, MSC and CMA CGM have applied low-water surcharges since 2024 **Buyer impact: regional cargo re-routing costs.**

Mississippi

MODERATE

UNITED STATES

PEAK DISRUPTION · Q3–Q4 2026

50%
of US grain exports flow here

3rd in 4
years of low water

Lighter barge loads and smaller tows at St. Louis are already building grain and fertilizer delays into the autumn harvest. **Buyer impact: US grain & fertilizer shipment delays.**

Sources: ACP / Splash247, Hapag-Lloyd, Maersk, USACE, tocco.earth

The Two Stress Points

El Niño can pressure industry through two channels simultaneously — the crops, and the energy to process them.

STRESS 1 — Agricultural Raw Materials

HIGH

CROPS IN THE DROUGHT PATH

Palm Oil
Indonesia · Malaysia

Rubber
Thailand · Indonesia · Vietnam

Cotton
India · Pakistan

Cocoa
Ghana · Ivory Coast

Rice / Sugar
India · Thailand · Vietnam

Wheat
Australia

PRICE & INPUT-COST SIGNALS

+7.5% — **FAO Sugar Price Index**
May 2026 · driven by concerns over anticipated tightening of global sugar supplies

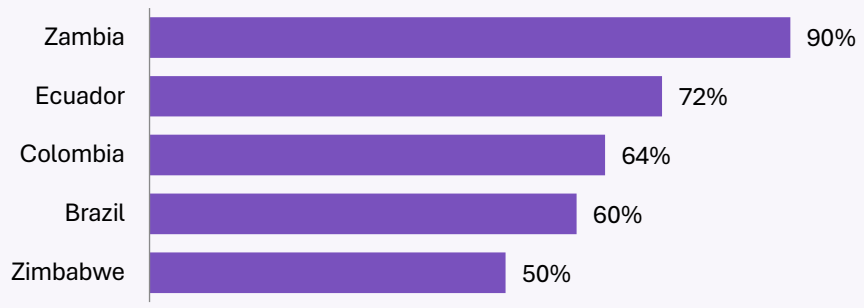
+30% — **Fertilizer Price Index**
Projected increase; supported by higher input costs — nitrogen/phosphate — and resilient demand

80–90% — **Gas Share Of Ammonia Cost**
High gas prices flow directly into crop input costs — compounding El Niño yield risk.

STRESS 2 — Manufacturing Energy

HIGH

HYDROPOWER DEPENDENCY (% OF POWER)



Approx. normal-year share; 2024 ran lower on drought.

WHEN RESERVOIRS FALL, MANUFACTURERS CHOOSE

Power Rationing — lost output

OR

Diesel / LNG backup — higher costs

+22% — **Aluminum Price (World Bank, 2026)**
Most power-intensive industrial process — smelter output falls as the same reservoirs drop. (CMO Apr 2026)

AT-RISK HUBS · Vietnam · Bangladesh · Indonesia · Colombia

Precedent — 2023: Colombia imported record LNG (36.3 Bcf) for power as reservoirs fell below 30%; global hydro hit multi-year lows.

Where The Two Stresses Compound · Sector Exposure

Energy runs through agriculture end to end El Niño hits both at once: lower output + higher processing cost.

FMCG	Confectionery	Textiles	Semiconductors	Fertilizer
Palm	Cocoa & Sugar	Cotton	Water scarcity (drought)	Drought-driven input demand
Fertilizer + freight	Energy	Hydro-powered mills	Water/Energy (WEF)	Gas feedstock, Hormuz

Sources: IHA, Our World in Data, World Bank, IEA, S&P Global, FAO Oilcrops Index, World Grain, European Commission, tocco.earth

The Macro Wave

El Niño layers a food-led inflation wave on top of an already energy-shocked global economy keeping policy tight into 2027

FOOD & CPI INFLATION — El Niño

15.8%

A very strong El Niño drives +15.8% cumulative rise in global wholesale food prices by H2 2028 → EU food CPI +1.3% over two years, +0.1 ppt to headline CPI

Food = 25%+ of EM CPI baskets · India FY27 CPI ~5.6% · EM rate cuts delayed.

GDP GROWTH · 2026 — Energy/Hormuz · El Niño

2.5%

Down from 2.9% in 2025 — the lowest since COVID; two-thirds of economies downgraded. Hormuz/energy is the main driver, El Niño a flagged downside.

Recovery to 2.8% in 2027 — still 0.4 ppt below the 2010s average.

RECESSION / FISCAL · DOWNSIDE — Energy · Fin. stress

1.3%

World Bank downside: growth 1.3%, inflation 4.4% if the energy shock deepens with financial stress. Schroders: recession likely avoided, but only narrowly.

Weaker sovereigns hit hardest; even strong ones face food-price fiscal risk.

ECONOMIC LOSSES · EL NIÑO-DRIVEN — El Niño

$1.8T+

Modeled long-run US GDP drag by ~2032 (Dartmouth analog; not a point forecast). Global losses run into the trillions and persist 5+ years.

Analogs: $5.7T (1997–98) · $4.1T (1982–83) · up to $84T this century.

Sources: World Bank, Schroders, Callahan & Mankin, Science 2023 (Dartmouth), IMF, ECB, HSBC

THE TAKEAWAY

Implications for Procurement

Historical risk is visible, but many 2026–27 contracts may not yet reflect the full weather, freight, and energy pass-through. The next two quarters are the window to act.

01 **Lock forward cover on high-risk tighteners.**

Palm oil, rubber and copper pair real El Niño risk with tightening supply — prioritise these for forward contracts and options.

02 **Diversify origins away from drought clusters.**

SE Asia, South Asia and East Africa peak together in Aug–Sep. Qualify alternate origins now, before everyone competes for them.

03 **Build freight contingency for the waterways.**

Panama and the Rhine peak Q4 2026–Q1 2027. Pre-negotiate surcharge terms and alternate routing before low water bites.

04 **Re-baseline budgets for the energy pass-through.**

Even surplus commodities carry higher landed cost via fertilizer, processing energy and crude. Model the second-order, not just the harvest.

ALSO REVIEW · RISK CONTROLS

Currency	Hedge FX exposure in El Niño-sensitive sourcing hubs (IDR, BRL, INR, VND) where food inflation and export volatility can drive currency swings and landed-cost variability
Insurance & force majeure	Review force majeure clauses for climate and low-water disruptions; consider parametric weather insurance and trade-credit cover in high-concentration sourcing regions.
Counterparty credit	Reassess credit exposure to drought-stressed suppliers; monitor liquidity pressure and pre-qualify alternate suppliers ahead of peak disruption windows

Our Comprehensive Services

Procurement Resource delivers data-driven procurement intelligence that helps businesses make faster, more informed sourcing decisions. Through an array of digital solutions and customized studies, we turn complex market information into clear, actionable insights. Powered by research, analytics, and AI, our solutions help procurement teams identify savings opportunities, strengthen negotiations, manage supply risks, and build more resilient sourcing strategies.

Commodity Price Database	**Should Cost Models**	**Trade Data Analytics**
Category Intelligence	**Competitor Benchmarking**	**Intirty AI**

Get In Touch

30 North Gould Street, Sheridan, Wyoming,
82801 (US)Level IV, C 130 Noida, Sector 2,
201301 (India)

Call: +1-415-325-5166

Email: sales@procurementresource.com

Website: www.procurementresource.com

Procurement Resource | claight

Australia **Philippines** **United Kingdom** **Vietnam**