

Commodity masterclass



Cocoa

Mondelēz
International
SNACKING MADE RIGHT

26th November 2024



THE CONSUMER GOODS FORUM - ANTITRUST CAUTION

"The Forum shall not enter into any discussion, activity or conduct that may infringe, on its part or on the part of its members, any applicable competition law. By way of example, members shall not discuss, communicate or exchange any commercially sensitive information, including non-public information relating to prices, marketing and advertising strategy, confidential individual company level innovation and R&D projects, costs and revenues, trading terms and conditions with third parties, including purchasing strategy, terms of supply, trade programmes, or distribution strategy."

MESSAGE TO NEW MEMBERS OR PEOPLE TAKING PART FOR THE FIRST TIME:

"Please take note that taking part in the Forum is subject to having read and understood the Forum's competition guidelines and list of Do's and Don'ts. If you have not yet done so, please do so now."

<https://www.theconsumergoodsforum.com/wp-content/uploads/2023/09/The-Consumer-Goods-Forum-2023-Competition-Law-Governance-Guidelines.pdf>



Agenda



Provide overview on **commodity context**



Share **regional specificities**



Present **solutions** + case studies



Questions, answers & next masterclass in series

Unrecorded section

A TASTE OF WHO WE ARE

mdlz

Empowering people to snack right

~91k employees

150+ COUNTRIES

\$36B NET REVENUE



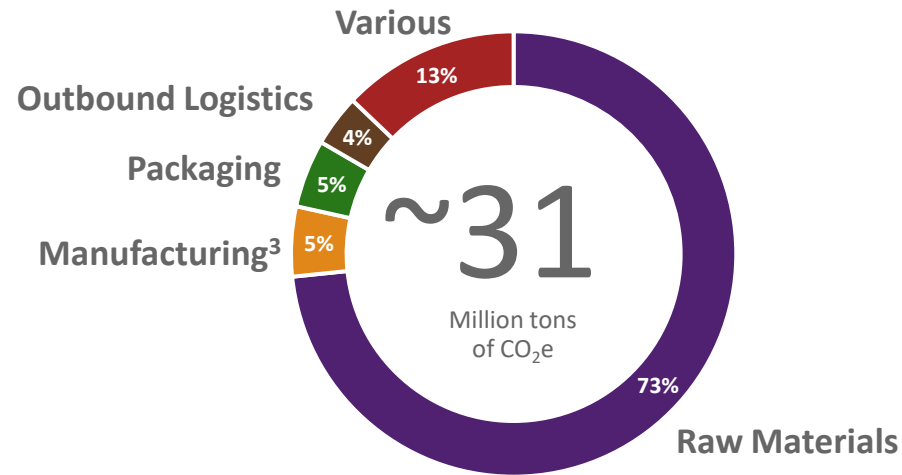
- #1 in Biscuits 
- #3 in Cakes & Pastries 
- #3 in Snack Bars 
- #2 in Chocolate 

2023 data - category position. Source: Euromonitor

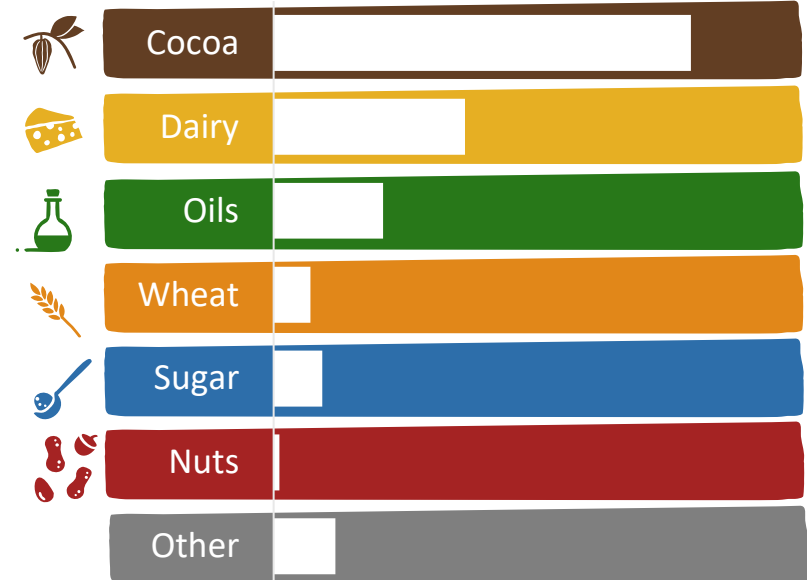
MDLZ'S CO2 FOOTPRINT INCLUDED IN NET ZERO CARBON GOAL

Over 70% of emissions from raw materials

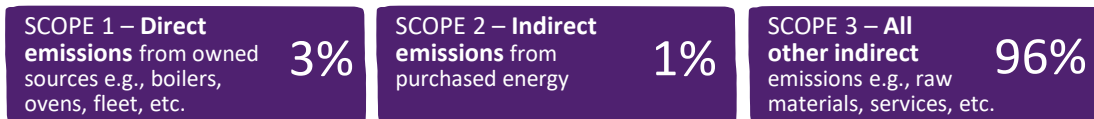
2023 CO₂E EMISSIONS ^{1,2}



Raw materials Break out



Memo: Breakdown of MDLZ Scope 1, 2, 3 emissions



¹ Represents >90% of our total CO₂e footprint in accordance with SBTi's net zero standard.

² Excludes Chipita and Ricolino acquisitions. Will be integrated during future cycle.

³ Internal and external manufacturing

THREE MAJOR CARBON SOURCES INFLUENCE OUR STRATEGY

carbon sources

Land conversion



Land conversion
DRIVEN by
agricultural
production

FARM Practices



cattle digestive
emissions,
cattle Feed,
FARMING INPUTS,
soil depletion

FOSSIL FUEL use



Fuels USED For
combustion
(Energy) and
Materials (Pack)

strategy

Deforestation free

Regenerative
agriculture

Reduce/Replace
Fossil fuels

Focus Areas



Cocoa



Dairy



Palm



Wheat



Others



LogOps



RE/EE



Pack

An aerial photograph showing a three-way road intersection in a rural landscape. The roads are paved and meet at a central point. The surrounding fields are a mix of green and brown, suggesting different crops or stages of growth. There are several trees scattered around the intersection. The word "Context" is overlaid in white text on the left side of the image.

Context

Overall cocoa with ~\$26B market value¹ & 5 Mt volume...

~12MM Hectares
(global, 2022)

~5 Mt of cocoa produced²
(global, 2022/23)

...half of which is coming from top 2 producing countries



Ivory Coast

~2 Mt



Ghana

~550 kt

Other top producers:



Ecuador

~450 kt



Cameroon

~350 kt



Nigeria

~330 kt



Brazil

~250 kt



Peru

~200 kt



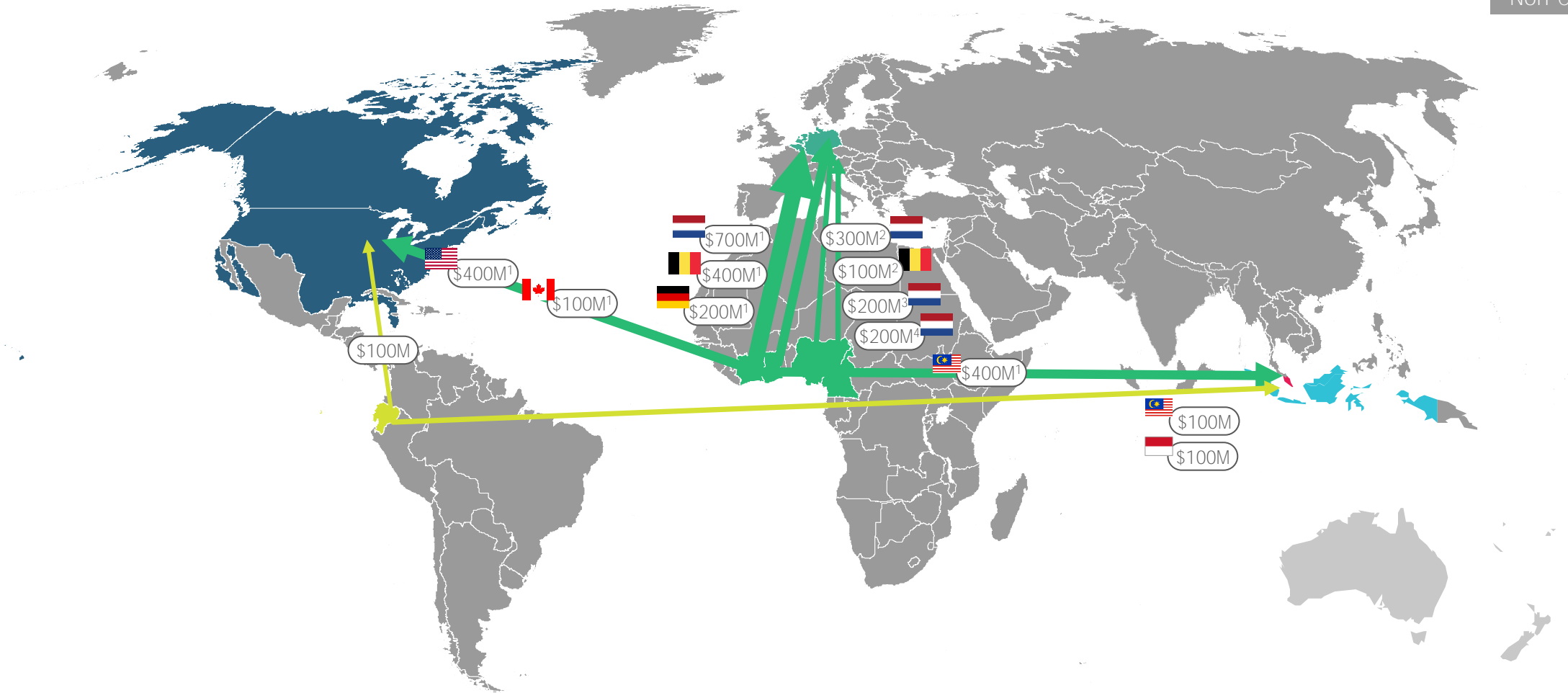
Indonesia

~150 kt

Note: Estimated production volume, thousand tonnes (kt) or million tonnes (Mt), 2022/23
Sources: 1) Includes cocoa butter, powder and liquor: www.expertmarketresearch.com/reports/cocoa-market/
2) ICCO Bulletin #2 2024 and www.kakaoplattform.ch/about-cocoa/cocoa-facts-and-figures

West African markets are top cocoa exporters across top producing markets

Non-exhaustive



1. From Ivory Coast 2. From Ghana 3. From Nigeria 4. From Cameroon


Note: base year 2022, Commodity code used = 180100, considering top 3-5 export countries in \$M USD. Showing streams >\$100MM only. Source: [UN Comtrade data base & OEC World](#)

> \$XXM \$M USD export value (top 3-5 export countries shown per market, '22) ■ ■ ■ Different colors to represent different origin countries/regions ➔ Commodity flows (size relates to \$USD export value)

Understanding carbon sources and sinks on cocoa farms




SOURCE: LAND USE CHANGE
carbon released by deforestation and other land conversion events



SINK: AGROFORESTRY
long-term carbon storage in biomass from shade trees or other tree crops

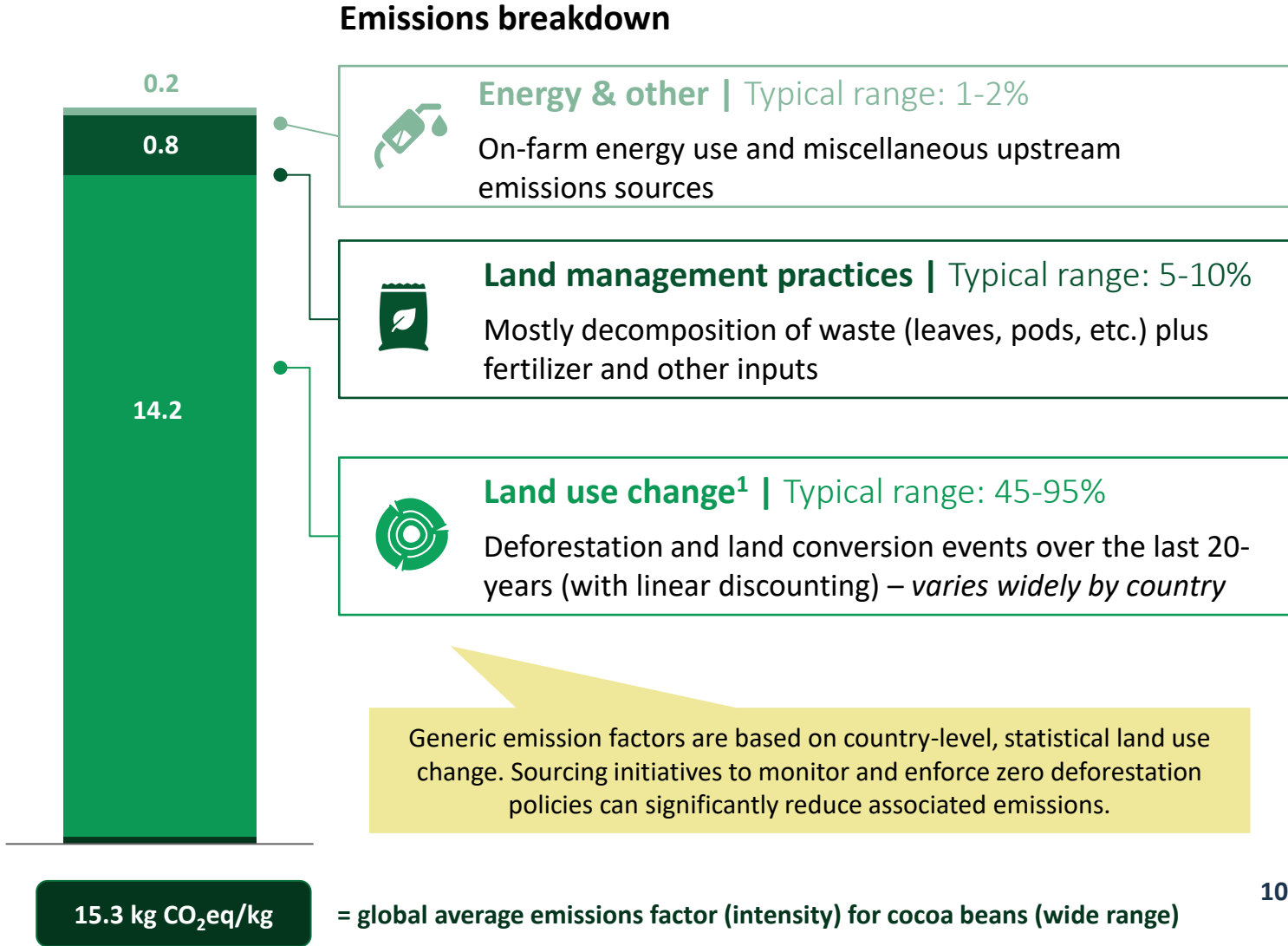
SOURCE: FERTILIZER
N₂O from fertilizer application (+ some upstream emissions from fertilizer production)



SOURCE: BIOWASTE
CH₄ + other biogenic emissions produced by decomposing leaf litter and waste

Land use change drives GHG impact

For on-farm cocoa cultivation, land use change drives a large majority GHG impact

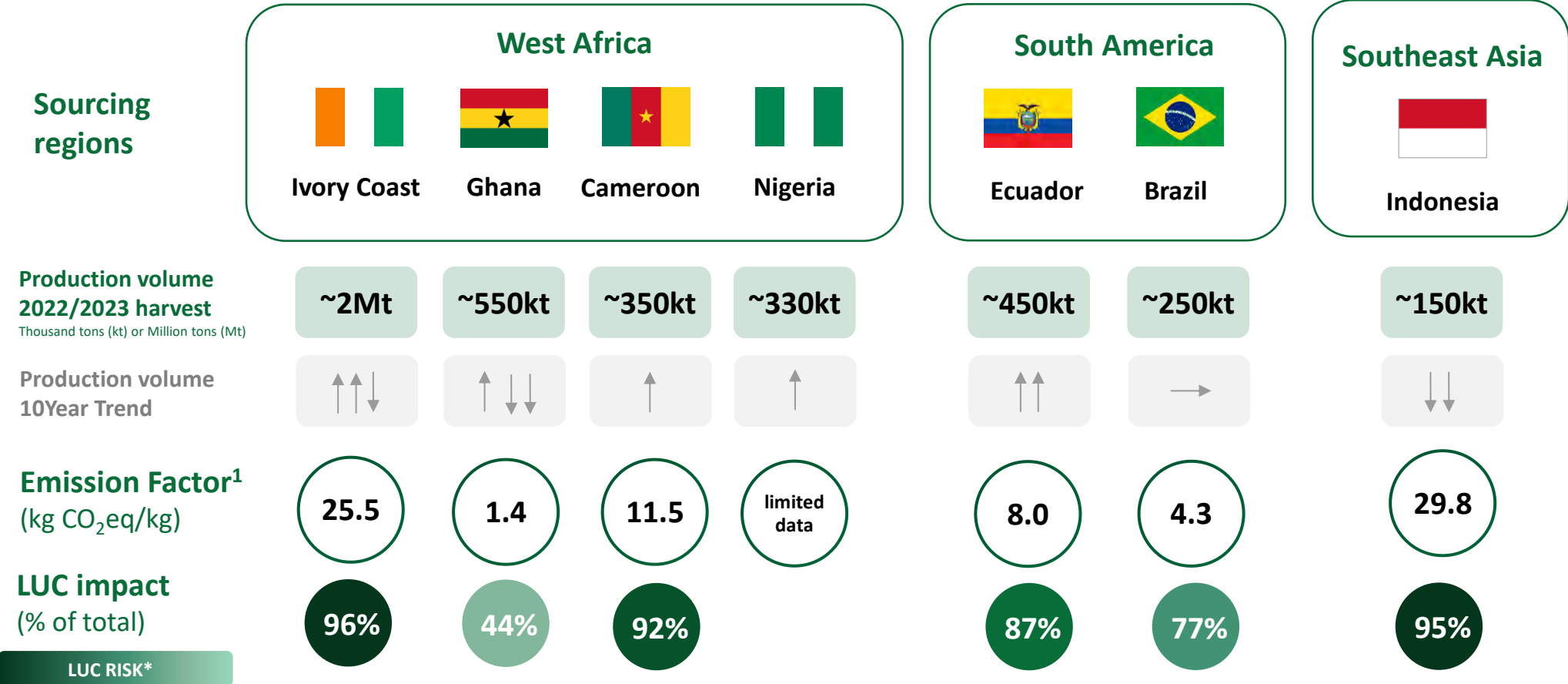


¹Source: WFLDB 3.10 database (2024)



Regional specificities

Land use change impacts vary by country, but many of the top-producing countries carry high risk



1) Source: WFLDB 3.10 database (2024) **NOTE:** risk assessment based on country-level statistical analysis of publicly available data; real risks vary by region and supply chain.

The main archetype for cocoa production is small holder farming

Non-exhaustive

Small, family run

~95%



Large scale

~5%



Yield, ave

- 400 – 600 kg per hectare
- Up to 3000kg per hectare

Farm size

- 1 - 5 hectares
- 400 – 1'000 hectares

of farmers













- Abt 5 to 6MM
- Few

Notes

- All geographies
- Low input / low tech / on farm tree planting
- Latin America
- Enhanced irrigation, fertilization, crop science, agroforestry

Key challenges to address for cocoa decarbonization

Key decarbonization challenges across commodities

 <p>Large & fragmented supplier landscape</p>	 <p>High degree of variability in system across regions</p>	 <p>Limited awareness on solutions available (e.g., at farm level)</p>	 <p>High upfront carbon reduction costs</p>	 <p>Lack of financing for adoption of low-carbon and regen. practices</p>	 <p>Short-term reduction in yield & farmer revenues</p>
 <p>Speed and rate of adoption of best practices on farm</p>	 <p>Lack of low-carbon technologies available at scale</p>	 <p>Lack of accurate carbon data at farm level</p>	 <p>Lack of measurability & common certifications</p>	 <p>Lack of unified and stable regulatory & policy landscape</p>	 <p>Strong dependency on Nature (land, climate)</p>

A photograph showing a group of people in a meeting. The focus is on their hands and arms as they interact with documents and a smartphone on a table. One person is pointing at a document, another is holding a smartphone, and a third is holding a tablet. The table is covered with papers, sticky notes, and a coffee cup. The word "Solutions" is overlaid in white text on the left side of the image.

Solutions

3 case studies to bring our commodity decarbonization journey closer



+10 years of implementing the Cocoa Life program



Focused on an integrated approach to support smallholder farming and communities



Addressing deforestation in cocoa regions



Consulting and engaging with diverse sector stakeholders to tackle deforestation



Developing farm practices & promoting agroforestry



Driving innovations to strengthen farmer resilience and enable carbon sequestration

10+ Years of implementing the Cocoa Life program

Challenges

- Large & fragmented supplier landscape with smallholder farmers
- Geographically restricted to the Equatorial region
- Slow, labor-intensive process
- Speed and rate of adoption of best practices on farm

Our goals

- Increase more sustainable cocoa volume at scale

Coverage

- Work with ~243,000 cocoa farmers¹
- 9 cocoa producing countries
- ~50 partners including cocoa communities, cocoa suppliers, NGOs, governments
- Holistic, integrated, community-based approach
- Invest US\$1 billion from 2012 to 2030



* All figures shown on this slide are approximate.

1. We aim to regularly and transparently report our progress. You can find additional details on Mondelēz International's ESG goals and reported information within the About This Report section of our [2023 Snacking Made Right Report](#)



Cocoa Life takes an integrated approach ACROSS THREE FOCUS AREAS



Addressing deforestation & climate change

Challenges

Deforestation: driven by agriculture, farmers seek new land to farm cocoa and other crops.
Climate change: causes more erratic rainfall, higher temperatures and drought; impacting farm productivity and farm health.

Main interventions

Awareness building & trainings	➤ Prevent forest loss
Distribution & planting of trees (on/off farm)	➤ Support ecosystem services and climate resilience
Farm mapping & satellite monitoring	➤ Help identify areas at risk and take action
Payment for Ecosystem Services Models	➤ Innovative pilots to help accelerate



Progress Cocoa Life West Africa (focus Ghana & Côte d'Ivoire)^{1,2,3}

~ **146,000** farms mapped²
 ~ **323,000** hectares with deforestation risk assessments completed²
 ~ **16,500** farmers applying agroforestry²
 ~ **1,208,000** trees distributed for on farm & ~**529,000** trees for off farm planting²
 ~ **150** cocoa communities with active forest restoration and protection program²
Near no deforestation on or closely around Cocoa Life registered farms in West Africa since 2018³



Enablers

MRV service providers (farm mapping/monitoring, tree count & survival monitoring)
 Public private partnerships.

- Align with national strategies, incl updated maps
- Align definitions

Example: Cocoa and Forests Initiative

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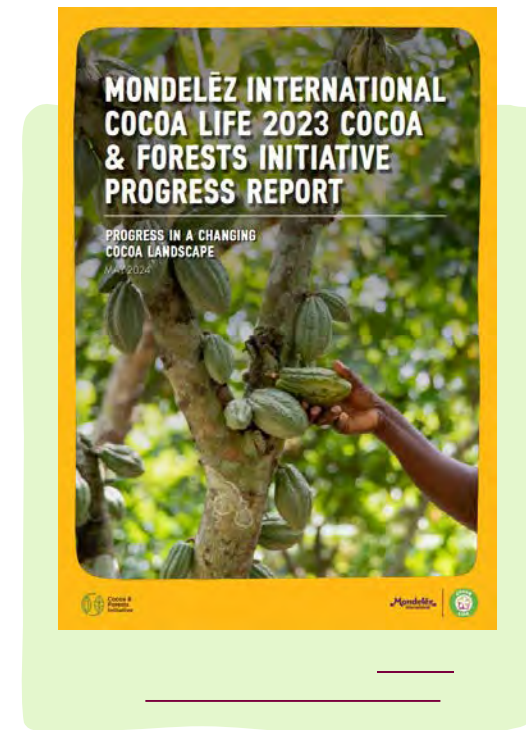
² Reported information for the period from October 1, 2022 to September 30, 2023 covers Ghana and Côte d'Ivoire unless otherwise stated. This data is provided by third parties. Reported information based on latest estimate. All figures are approximate. Source: [MDLZ Cocoa Life 2023 CFI Progress Report](#)

³ Reported information for the period from January 1, 2023 to December 31, 2023 for West Africa includes Côte d'Ivoire, Nigeria and Ghana. Source: [2023 Snacking Made Right Report](#)

Partnering with the Cocoa & Forests Initiative



Cocoa & Forests Initiative



Developing land management (Farm) practices

Challenges	<p>Productivity, low yields Risk of poverty and low incomes</p>	<p>Limited knowledge of farming techniques Climate change</p>
Main interventions	<p>Awareness building & trainings – Use of planting material – Use of farming input Farmer coaching Distribution & planting of trees (on farm)</p>	<ul style="list-style-type: none"> ➤ Increase yield ➤ Co-creation of tailored Farm Development Plans ➤ Promote agroforestry and climate resilience ➤ Crop and income diversification
Progress^{1,2}	<p>~ 225,000 farmers trained, coached or having a farm development plan on Good Agricultural Practices ~ 498,000 community members & farmers trained on Good environmental practices ~ 8,589,000 economic shade trees distributed ~ 33,531,000 cocoa seedling distributed ~ 360,000 community members involved in additional Income Generating Activities</p>	
Enablers	<p>Implementing partners (suppliers, NGOs) delivering program on the ground Verification and Learning (can be other partners) Collaboration with governments, research organizations and impact funds (Multi) stakeholders platforms e.g., World Cocoa Foundation</p> <ul style="list-style-type: none"> – Align definitions – Share good practices 	



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² Reported information for the period from January 1, 2023 to December 31, 2023 covers Brazil, Cameroon, Côte d'Ivoire, Dominican Republic, Ecuador, Ghana, Indonesia, India, and Nigeria unless otherwise stated (which differs from prior years). This data is provided by third parties. All figures are approximate.

Developing farm practices and promoting agroforestry

Key activities

Distributing **economic shade trees** incl
fruit & timber

Helps **sequester carbon (carbon removals)**

Benefits

- 1 Income diversification for farmers
- 2 Soil conservation
- 3 Biodiversity preservation
- 4 Natural barrier to pests and diseases
- 5 Helps crops become more resilient to climate change and extreme climatic events.



Developing farm practices and promoting agroforestry

CROP SCIENCE

12 hectares R&D site

Cocoa grown around diverse trees, perennial and annual crops

Assess benefits of different tree-crop combinations and spacings

Shade tree management protocol





Good farm practices

Understanding of agroforestry benefit on shade, biomass production, yield and carbon sequestration

Validating the results of the trials on farms



There are 4 main levers to address cocoa decarbonization

 Levers	 Practices	 Typical carbon reduction potential	 Potential benefits to farmers
Zero Deforestation	Satellite monitoring Voluntary certifications Regulations (EUDR) Farmer engagement (Sourcing from low-risk regions)	<div style="background-color: #004a33; color: white; padding: 5px; text-align: center; font-weight: bold;">HIGH</div>	Access to more markets Premiums
Agroforestry	Native shade tree cover Commodity tree crops (e.g. bananas) Subsistence tree crops	<div style="background-color: #004a33; color: white; padding: 5px; text-align: center; font-weight: bold;">MED</div>	Diversified farm income Access to carbon markets Increased productivity Climate adaptation Food, timber for home use / additional income
Productivity	Tree selection & breeding Pruning/tree maintenance Disease prevention Farmer training & technical assistance	<div style="background-color: #004a33; color: white; padding: 5px; text-align: center; font-weight: bold;">MED</div>	Increased income Farm longevity Professionalization & development
Farm Management	Composting crop residues (leaves, pods, etc.) Low carbon fertilizers Biochar	<div style="background-color: #008080; color: white; padding: 5px; text-align: center; font-weight: bold;">LOW</div>	Increased productivity



If you would like to know more...

International

COCOA LIFE'S GLOBAL PROGRESS IN NUMBERS

2023 FIGURES*

~US\$1 BILLION IN INVESTMENTS (2012-2030)

% OF COCOA VOLUME FOR MONDELÉZ INTERNATIONAL CHOCOLATE BRANDS SOURCED THROUGH COCOA LIFE

2025 GOAL -100%
2023 PROGRESS -85%¹

FARMERS REGISTERED WITH COCOA LIFE

2030 GOAL -300,000
2023 PROGRESS -243,000²

COMMUNITIES REACHED BY COCOA LIFE

2023 PROGRESS -3,200²

At a global level, cocoa life is delivering at scale across its key focus areas



HELPING TO GROW MORE PROFITABLE COCOA BUSINESSES

WE'RE HELPING TO GROW MORE PROFITABLE COCOA BUSINESSES TO HELP INCREASE THE NUMBER OF FARMING HOUSEHOLDS REACHING A LIVING INCOME.

225,000²

Farmers trained, coached or having a farm development plan on Good Agricultural Practices



380²

Nurseries

360,000²

Community members involved in additional Income Generating Activities



33,531,000²

Cocoa seedlings distributed

197,000²

Community members trained on business management



HELPING TO LIFT COCOA COMMUNITIES

WE'RE HELPING TO LIFT COCOA COMMUNITIES TO HELP ENHANCE CHILD PROTECTION SYSTEMS AND IMPROVE ACCESS TO QUALITY EDUCATION IN COCOA LIFE COMMUNITIES.

75%³

Child Labor Monitoring & Remediation Systems (CLMRS) coverage in West African Cocoa Life farming communities



2,800²

Communities with Child Protection Committees

5,600²

Village Savings and Loan Associations (VSLAs) operational

374,000²

Community members participating in Village Savings and Loan Associations (VSLAs)

304,000²

Community members trained on financial literacy

350,000²

Community members trained on gender awareness

1,722,000²

Community members and farmers educated on issues of child labor and forced child labor

1,300²

Village Savings and Loan Associations (VSLAs) linked to finance institutions

2,800²

Communities with a Community Development Committee (CODEC) and Community Action Plan (CAP) activated



HELPING TO PROTECT & RESTORE FORESTS

WE'RE HELPING TO PROTECT AND RESTORE FORESTS TO SEEK NO DEFORESTATION ON COCOA LIFE FARMS.

8,589,000^{2,4}

Economic shade trees distributed



256,000²

Cocoa Life registered farms mapped & monitored

498,000²

Community members & farmers trained on Good Environmental Practices



*All figures shown in this graphic are approximate.

¹Goal and reported information for cocoa volume sourced is based on a mass balance approach, which means that the equivalent volume of cocoa needed for the products sold under our chocolate brands is sourced from the Cocoa Life program. Reported information for the period from January 1, 2023 to December 31, 2023 includes volumes from cocoa producing countries Brazil, Côte d'Ivoire, Dominican Republic, Ecuador, Ghana, Indonesia, India, and Nigeria unless otherwise stated (which differs from prior years). Excludes markets where Mondelez International does not sell chocolate brands. Reported information based on latest estimate; independent, third-party verification in-progress. Any updates, if needed, will be included in the [ESG Datasheet](#).

²Reported information for the period from January 1, 2023 to December 31, 2023 covers Brazil, Cameroon, Côte d'Ivoire, Dominican Republic, Ecuador, Ghana, Indonesia, India, and Nigeria unless otherwise stated (which differs from prior years). This data is provided by third parties. Any updates, if needed, will be included in the [ESG Datasheet](#).

³Reported information for the period from January 1, 2023 to December 31, 2023 includes a Cocoa Life community in Ghana, Côte d'Ivoire, or Nigeria as covered by CLMRS if one or more household(s) in the community were visited and interviewed to identify children, if any, in or at risk of child labor, at least once over the last 2 years (January 1, 2022 through December 31, 2023), even if any appropriate remediation and post-remediation follow-up has not yet occurred. CLMRS data is collected and provided to MDLZ by third parties. An independent, third-party assurance process is underway, and any subsequent findings may result in changes to reported information if the underlying criteria, estimates, or available evidence change, as we continue to enhance our processes. Any updates, if needed, will be included in the [ESG Datasheet](#).

⁴Economic shade trees are non-cocoa trees and an important part of more sustainable cocoa farming: they help safeguard cocoa against too much sun and heat, help promote biodiversity, and can help provide additional income for farmers.

We aim to regularly and transparently report our progress. You can find additional details on Mondelez International's ESG goals and reported information within the About This Report section of our [2023 Snacking Made Right Report](#).



Not recorded – will not be available to the public

Time for your questions

Stay tuned for our next masterclasses



Next
masterclasses
in series



Thank you