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Action Area 3: progress on the three CSA pillars towards WBCSD Statement of Ambition



RESEARCH PROGRAM ON
**Climate Change,
Agriculture and
Food Security**



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High ambitions on three pillars of climate-smart agriculture (CSA)

OUTCOME: 50%
more nutritious food
available



ACTIVITY e.g. raise yields →

PRODUCTIVITY

OUTCOME: climate
resilient agricultural
landscapes and
farming
communities



ACTIVITY e.g. transfer skills →

**RESILIENCE,
INCOMES &
LIVELIHOODS**

OUTCOME: food GHG
emissions 30% lower &
land use change
emissions eliminated



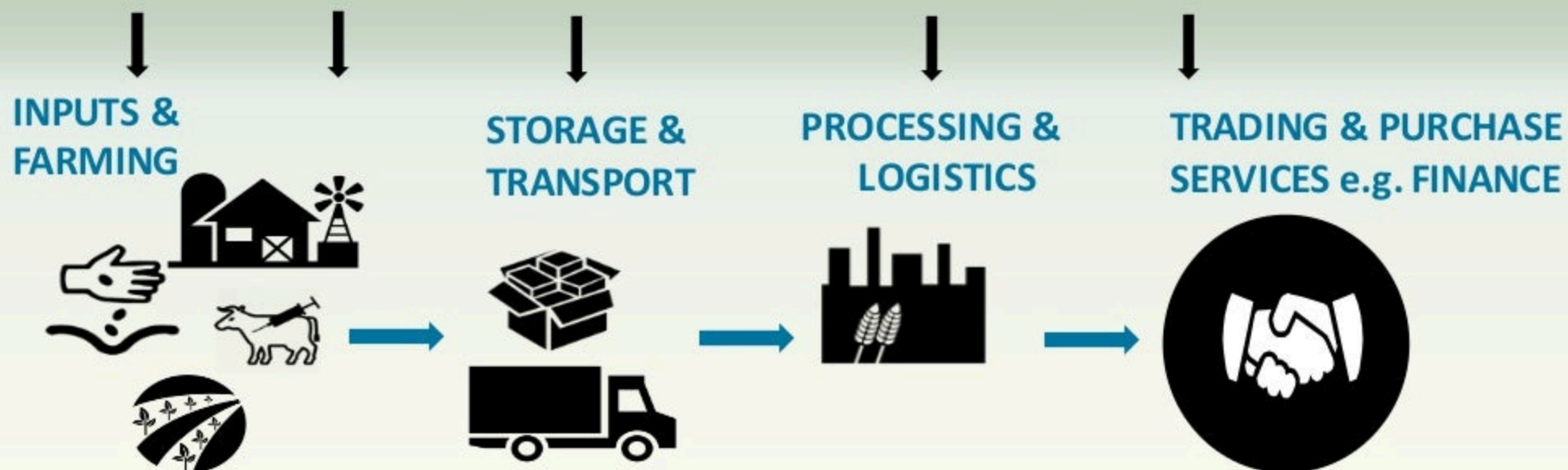
ACTIVITY e.g. halt forest conversion →

MITIGATION

Basic framework for measurement: two complementary data sources

COMPANY INDICATORS

(some are **OUTCOME** indicators and some are **ACTIVITY** indicators)



Enabling and regulatory environment

GLOBAL INDICATORS

(some are **OUTCOME** indicators and some are **ACTIVITY** indicators)

2016-2017 activities & milestones

- **Montreux, April 2016:** WBCSD members **approve the framework** and approach, and volunteer to contribute
- **Second half of 2016:** **Data search, data analysis, and phone calls** with companies
- **Montreux, March 2017:** First **stock-take and report** – using only information in the public domain

What's in the report?

- Simple **framework** and method
- For each CSA pillar:
 - A set of **recommended indicators**, linked to SDGs & WBCSD
 - The set of **actual indicators** currently reported by members
 - A 2010-2015 **stock-take** based on company & global data

Pillar 1 Productivity ambition



RESEARCH PROGRAM ON
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Food Security



WBCSD: “Increase global food security by making **50% more nutritional food available** through **increased production on existing land, protecting ecosystem services and biodiversity, bringing degraded land back into productive use and reducing food loss from field to shelf.**”



Pillar 1 Productivity indicators

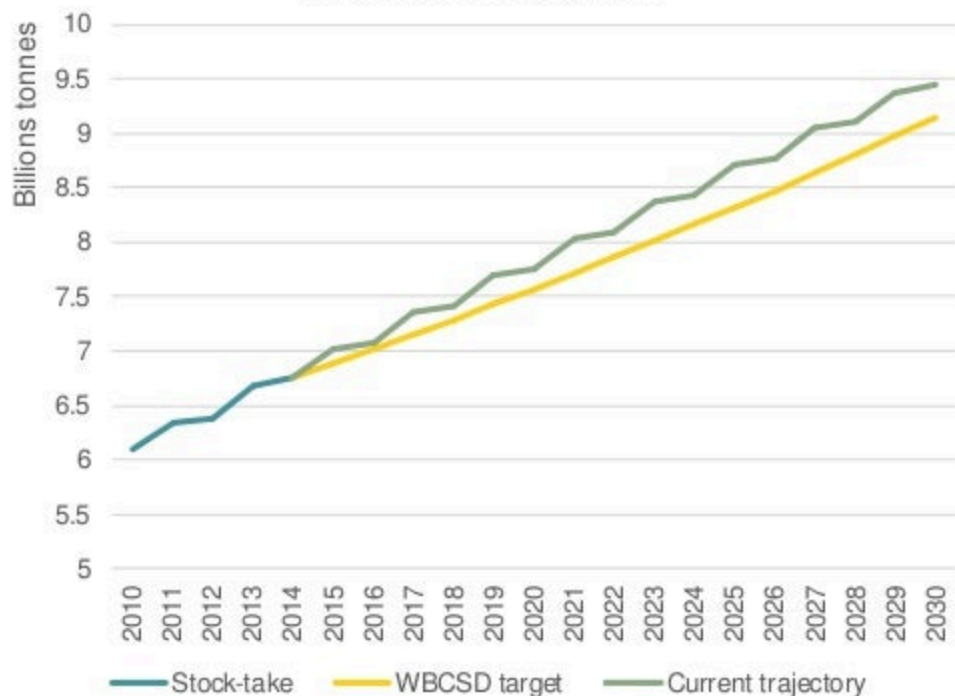
Component of WBCSD Pillar 1	Recommended indicators that align with WBCSD processes or SDGs	Other recommended indicators	Currently available indicators among two or more WBCSD CSA member companies
1.1 Improve the supply of nutritious food (OUTCOME)	Prevalence of moderate or severe food insecurity in the population, based on the Food Insecurity Experience Scale (SDG indicator 2.1.2)	Food production across range of key food groups Affordability of nutritious food e.g. hours of labor to buy daily nutritional needs	None
1.2 Sustainably improve production on existing land (ACTIVITY)	Proportion of agricultural area under productive and sustainable agriculture (SDG indicator 2.4.1) Production per labour unit by classes of farm size (SDG indicator 2.3.1) Change in water-use efficiency over time (SDG indicator 6.4.1)	Production of food (tonnes, calories, nutrition) per unit nutrient, water, land and energy	Percentage yield change Total water use (see Pillar 2)
1.2 Protecting ecosystem services and biodiversity, and bringing degraded land back into productive use (ACTIVITY)	WBCSD Action 2020 objective to restore at least 12 million hectares per year of degraded land Proportion of important sites for terrestrial and freshwater biodiversity that are covered by protected areas, by ecosystem type (SDG indicator 15.1.2) Freshwater withdrawal as a proportion of available freshwater resources (SDG indicator 6.4.2) Proportion of degraded land in total land area (SDG indicator 15.3.1)	Other ecosystem services indicators, such as prevalence of natural pollinators	Percentage of sustainable sourcing and certified raw materials
1.3 Reduce food loss from field to shelf (ACTIVITY)	WBCSD Food Loss and Waste Accounting and Reporting Standard Global food loss index; halve food waste (SDG indicator 12.3.1)	Food to landfill (kg) – see the WBCSD Standard for more detail	Waste (not food) to landfill (kg)

Take-home: companies could report more *already measured* indicators; SDG synergies

Pillar 1 Productivity stock-take

GLOBAL INDICATORS

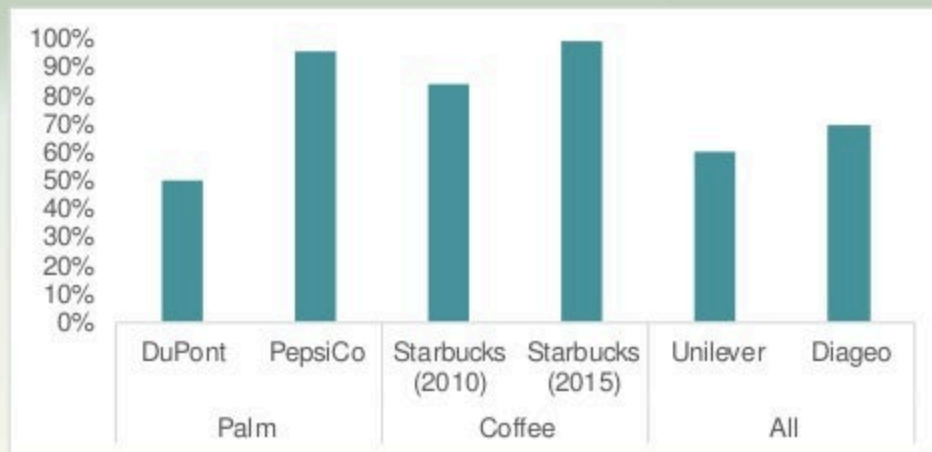
Global food production:
current trajectory
vs WBCSD ambition



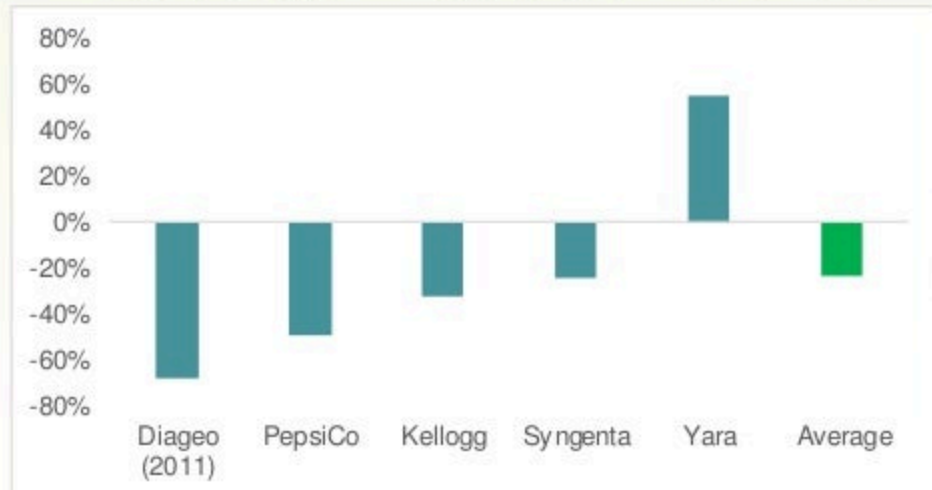
Take-home: we are on target;
but more reporting effort should go on
demonstrating *output per input*
and *nutritious food access for poor*

COMPANY INDICATORS

Percent materials sustainably sourced



Percent change in waste to landfill 2010-2015

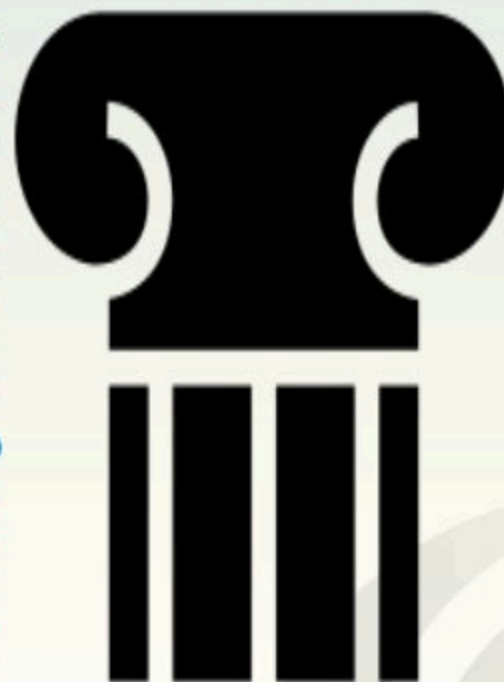


Pillar 2 Resilience, incomes & livelihoods ambition

WBCSD: “Strengthen the **climate resilience of agricultural landscapes and farming communities** to successfully adapt to climate change through **agro-ecological approaches** appropriate for all scales of farming. Invest in rural communities to **deliver improved and sustainable livelihoods** necessary for the future of farmers, bringing **prosperity** through long-term relationships based on **fairness, trust, women’s empowerment and the transfer of skills and knowledge.**”

OUTCOME:
sustainable
livelihoods

ACTIVITY e.g. skills transfer 



**RESILIENCE,
INCOMES &
LIVELIHOODS**

Pillar 2 Resilience, incomes & livelihoods indicators

Component of WBCSD Pillar 2	Recommended indicators that align with WBCSD processes or SDGs	Other recommended indicators	Currently available indicators among two or more WBCSD CSA member companies
2.1 Improve rural incomes and livelihoods (OUTCOME)	<p>Number of people below international or national poverty line (SDG indicators 1.1.1 and 1.2.1)</p> <p>Average income of small-scale food producers, by sex and indigenous status (SDG indicator 2.3.2)</p>	Welfare among supplier farmers and wider community, e.g. number hungry months, % children at school, number of doctors per head	Headcount of improved livelihoods (undefined)
2.2 Implement agroecological approaches (ACTIVITY)	Proportion of local breeds classified as being at risk, not-at-risk or at unknown risk of extinction (SDG indicator 2.5.2)	Extent of agroecological approaches (ha, % operations, % supply)	Total water use
2.3 Maintain long-term fair relationships with smallholder suppliers (ACTIVITY)	None	<p>Percentage of smallholder suppliers who have entered a fair labour agreement</p> <p>Provision of services to farmers, e.g. percentage covered by climate information services or financial services</p>	None (one company tracks the percentage of farmers who have entered a fair labour agreement)
2.4 Empower women in smallholder farmer communities (ACTIVITY)	<p>(a) Proportion of total agricultural population with ownership or secure rights over agricultural land, by sex; and (b) share of women among rights-bearers (SDG indicator 5.a.1)</p> <p>Proportion of individuals who own a mobile telephone, by sex (SDG indicator 5.b.1)</p> <p>Proportion of women in managerial positions (SDG indicator 5.5.2)</p>	<p>Percentage of smallholder suppliers who are women</p> <p>Income and/or assets of women compared to men</p> <p>Representation of women in producer organizations and other bodies (% members and % leaders)</p>	Number of female farmers trained
2.5 Transfer skills and knowledge to smallholder farmers	None	Number and percentage of smallholder farmers trained	Number of farmers (not smallholders) trained

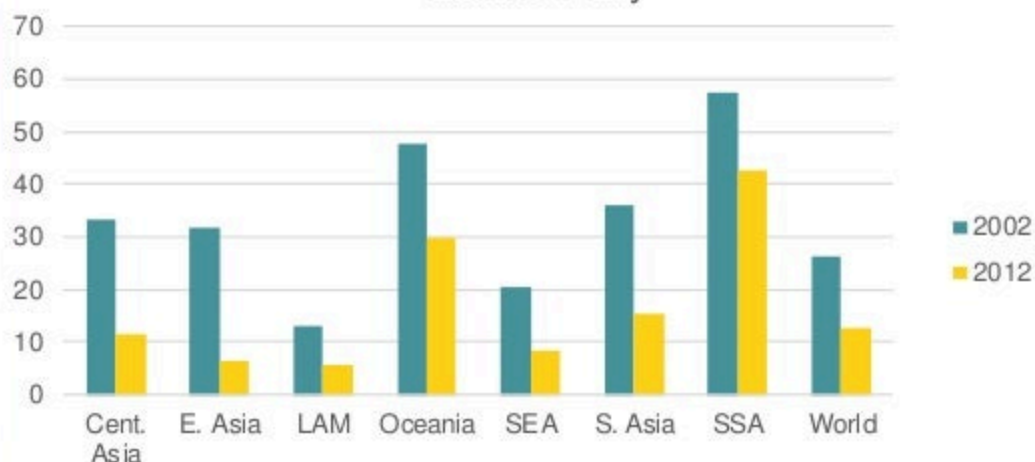
Take-home: not enough company indicators to track Pillar 2 progress

...stable outcomes from training
...her quality of product, reduced

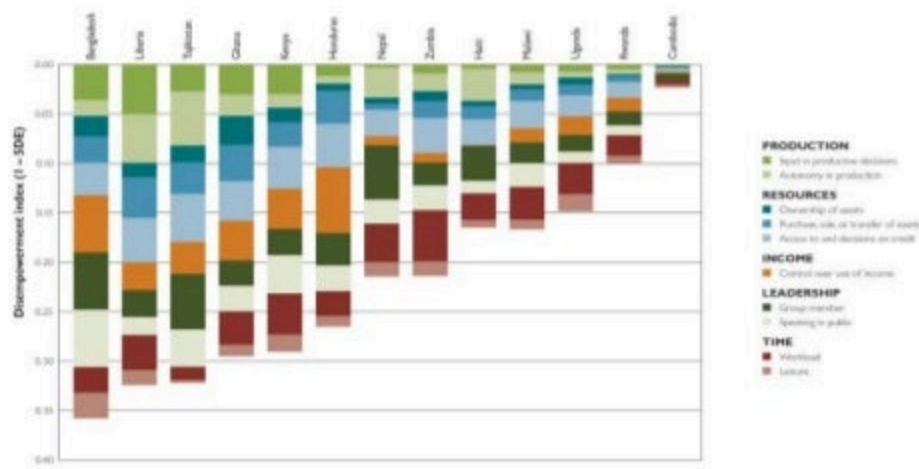
Pillar 2 Resilience, incomes & livelihoods stock-take

GLOBAL INDICATORS

SDG 1. % of population living below 1.90 US dollars a day



Women's empowerment in agriculture index (2015)



COMPANY INDICATORS

Watch this space

Take-home: need to (a) collect some basic activity data e.g. on *area under agro-ecological practices and number of farmers provided services* (b) test or show that CSA activities lead to positive Pillar 2 outcomes

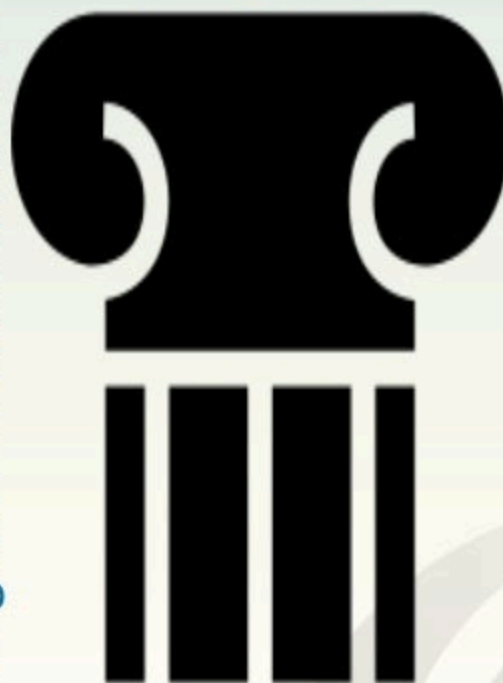
Pillar 3 Mitigation ambition

WBCSD:

- “Reduce GHG emissions by at least 30% of annual agricultural CO₂e emissions against 2010 levels both at the **farm level** and through reducing **food waste**.
- Eliminate GHG emissions from **land-use change** to commercial agriculture through working to **halt conversion of HCV or HCF forest and all grasslands, wetlands and peatlands.**”

ACTIVITY e.g. halt forest conversion 

OUTCOME:
lower
emissions



MITIGATION

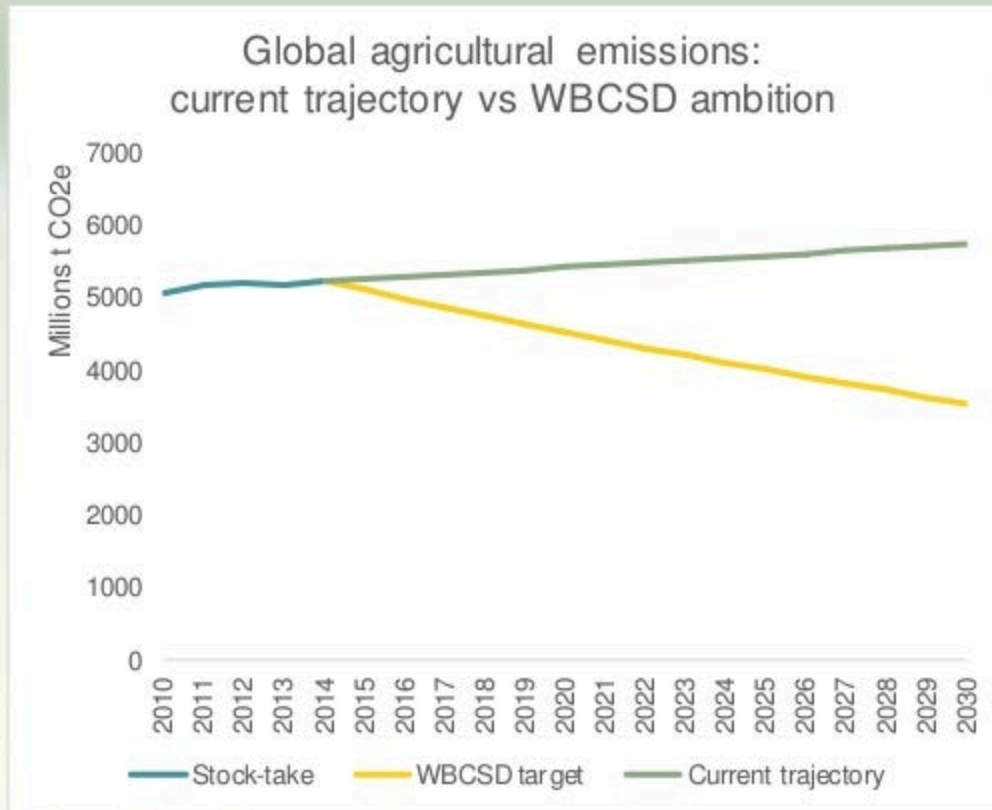
Pillar 3 Mitigation indicators

Component of WBCSD Pillar 3	Recommended indicators that align with WBCSD processes or SDGs	Other recommended indicators	Currently available indicators among two or more WBCSD CSA member companies
3.1 Direct agricultural emissions (OUTCOME)	WBCSD Greenhouse Gas Protocol Important to report total emissions (and fluxes), rather than emissions intensity, to align with the Paris Agreement	Total emissions from farming systems (CO ₂ e) Scope 1&2 emissions from agricultural companies (CO ₂ e)	Scope 3 emissions from agricultural inputs, food processing & retail companies (CO ₂ e)
3.2 Food supply chain emissions (OUTCOME)	Emissions per unit of value added (SDG indicator 9.4.1)	Scope 3 emissions from agricultural inputs, food processing & retail companies (CO ₂ e)	Scope 1&2 emissions from agricultural inputs, food processing & retail companies (CO ₂ e) Emissions intensity of products (CO ₂ e per kg) Use of resource-efficient packaging
3.3 Deforestation and other land use change (OUTCOME)	Forests Solutions Group zero deforestation commitment plus commitment to restore 30% global forest cover (1990 levels) by 2050, storing 45 Gt CO ₂ e	Total emissions from land use change (CO ₂ e)	Sustainable sourcing/certification of forestry-based goods

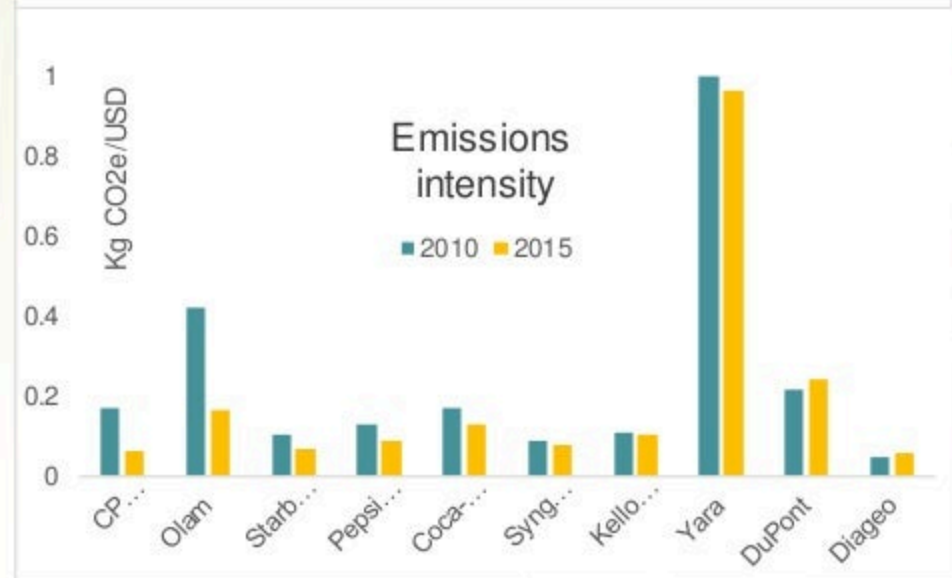
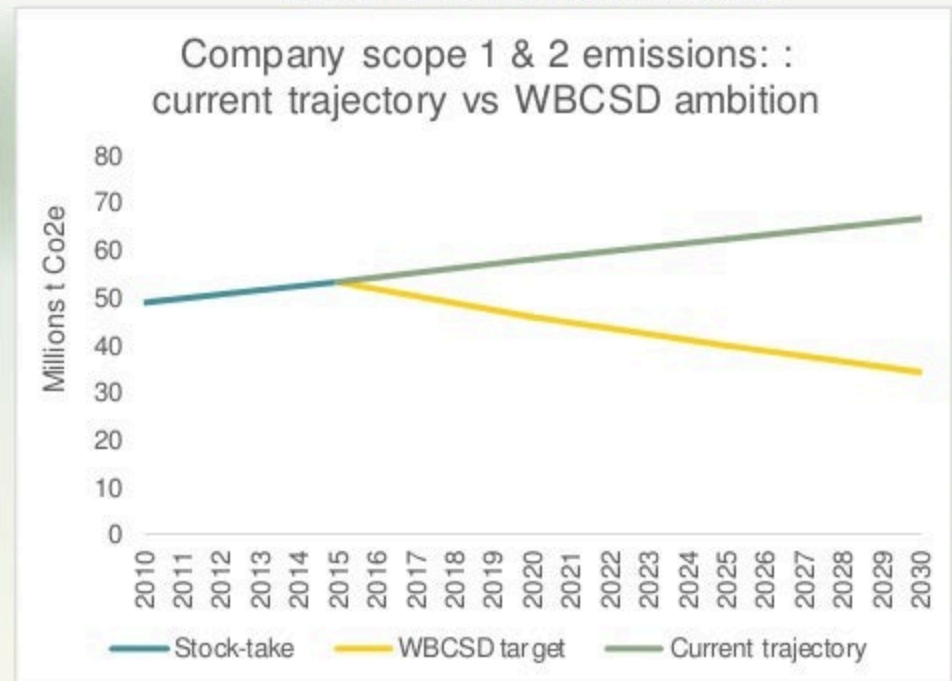
Take-home: best measured of the 3 pillars, but could pull out agriculture & food emissions

Pillar 3 Mitigation stock-take

GLOBAL INDICATORS



COMPANY INDICATORS



Take-home: we are way off target; food systems need absolute emissions reductions, not just reduced emissions intensities

Options going forward

New era of climate risk disclosure that will create a business case for “decision-useful, comparable, material data for your investors”

- Accelerate action, upgrade measurement in your company – action on CSA gives clear opportunities to demonstrate climate risk management & contributions to SDGs
- Build CSA into wider sustainability actions & metrics – no need for stand-alone approaches or additional protocols
- Use decision tools – e.g. CSA Planning and Indicator Tool <https://ccaafs.cgiar.org/csa-programming-and-indicator-tool>

And in collaboration with other WBCSD members & other partners:

- Apply metrics across whole value chains in road test countries – powerful way to manage and communicate effects of scale