



Food System
Economics
Commission

The Role of Diets in Reducing Food Systems' Hidden Costs

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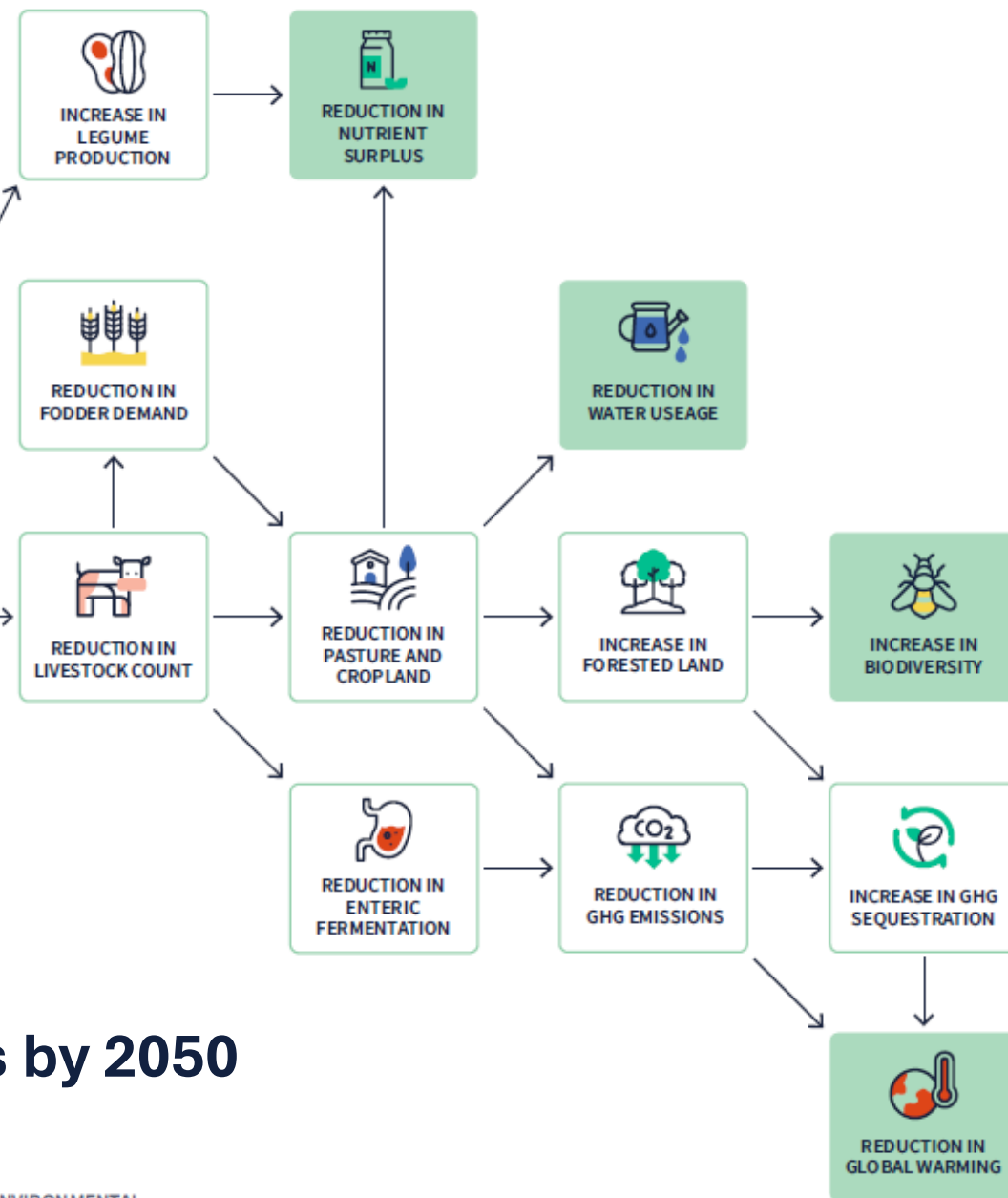
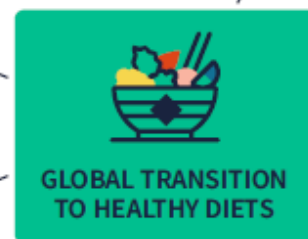
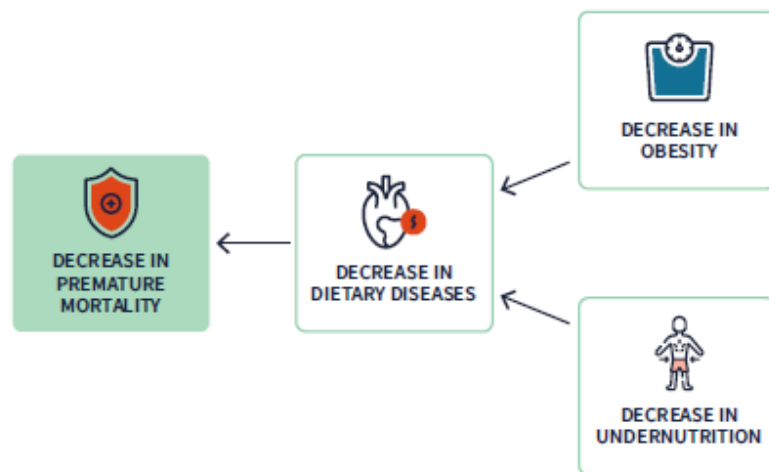
The Columbia Climate School, Columbia University





Of the 15 trillion USD/year unaccounted costs of the food system:

- Health costs are estimated to contribute **11 trillion USD/year** largely from the negative effects of labor productivity.
- Much of this is due to diet-related non-communicable diseases that claim **8 million** lives annually and **13% of global Disability Adjusted Life Years (DALYs)** in 2019
- The health costs also include a lower bound figure for the productivity costs of undernutrition, which affects **735 million people**.



Save 174 million lives by 2050

HEALTH
BENEFITS

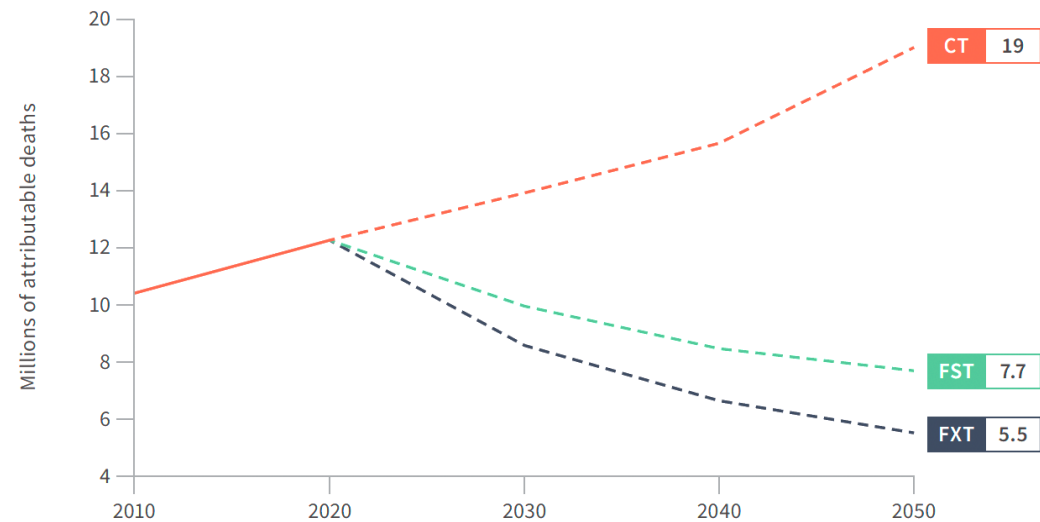
ENVIRONMENTAL
BENEFITS

Changes in mortality and obesity with food systems transformations



Global Premature Mortality

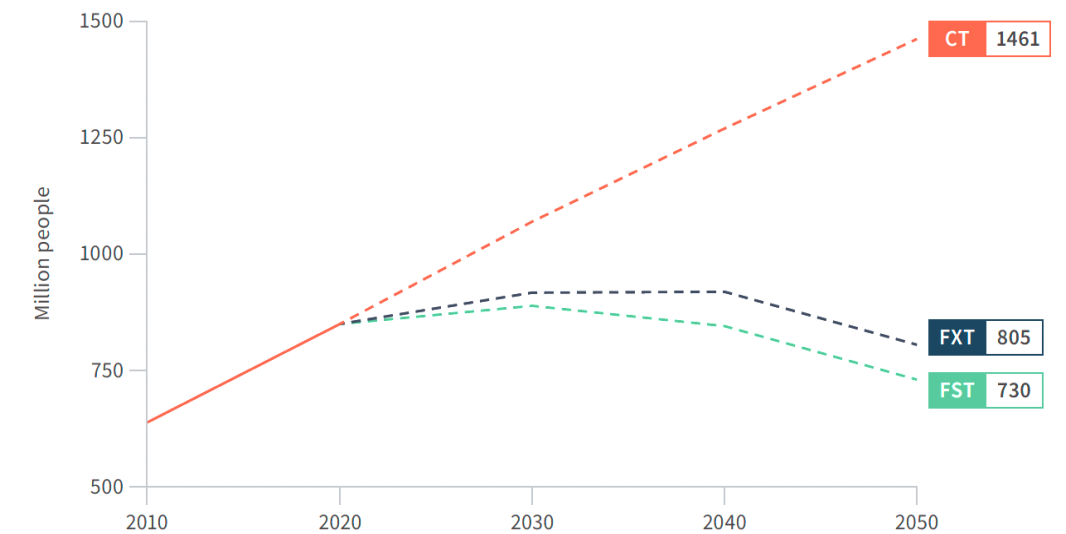
Millions of attributable deaths



CT Current Trends **FST** Food System Transformation **FXT** Food System Transformation + External

Global Obesity Prevalence

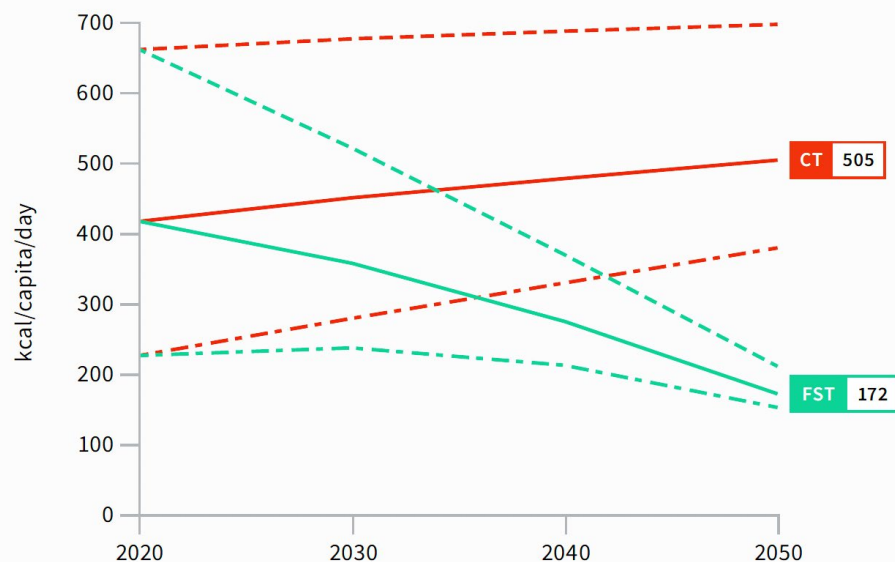
Million people



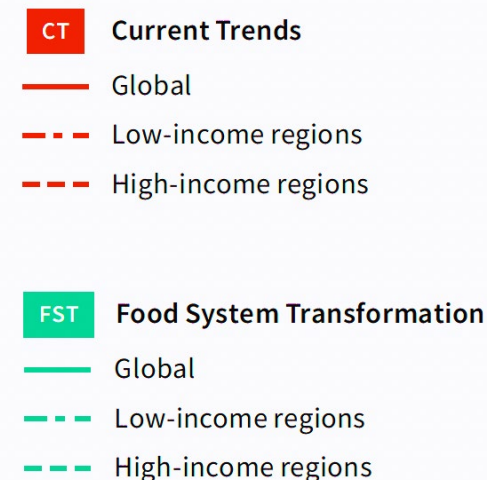
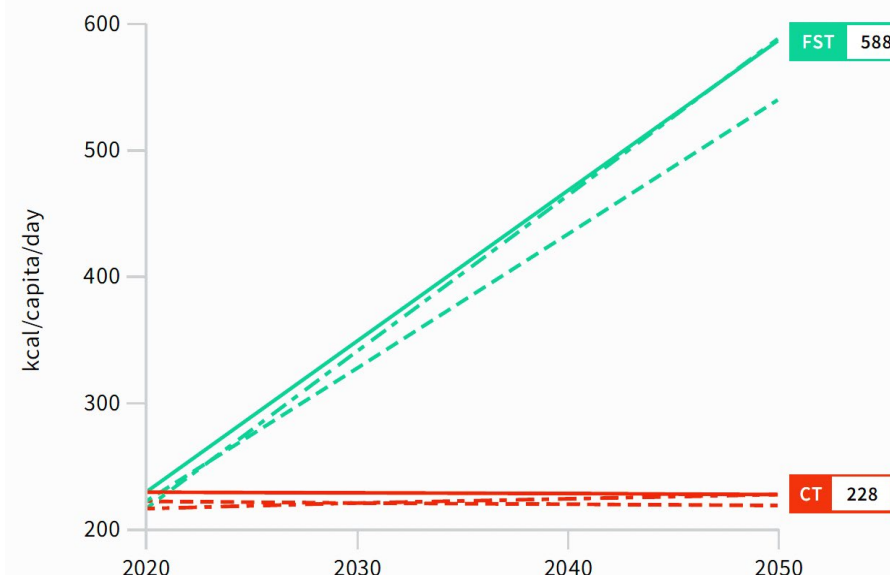
CT Current Trends **FST** Food System Transformation **FXT** Food System Transformation + External

Intake of select food groups globally, and in low- and high-income regions until 2050

2.4B Livestock product intake

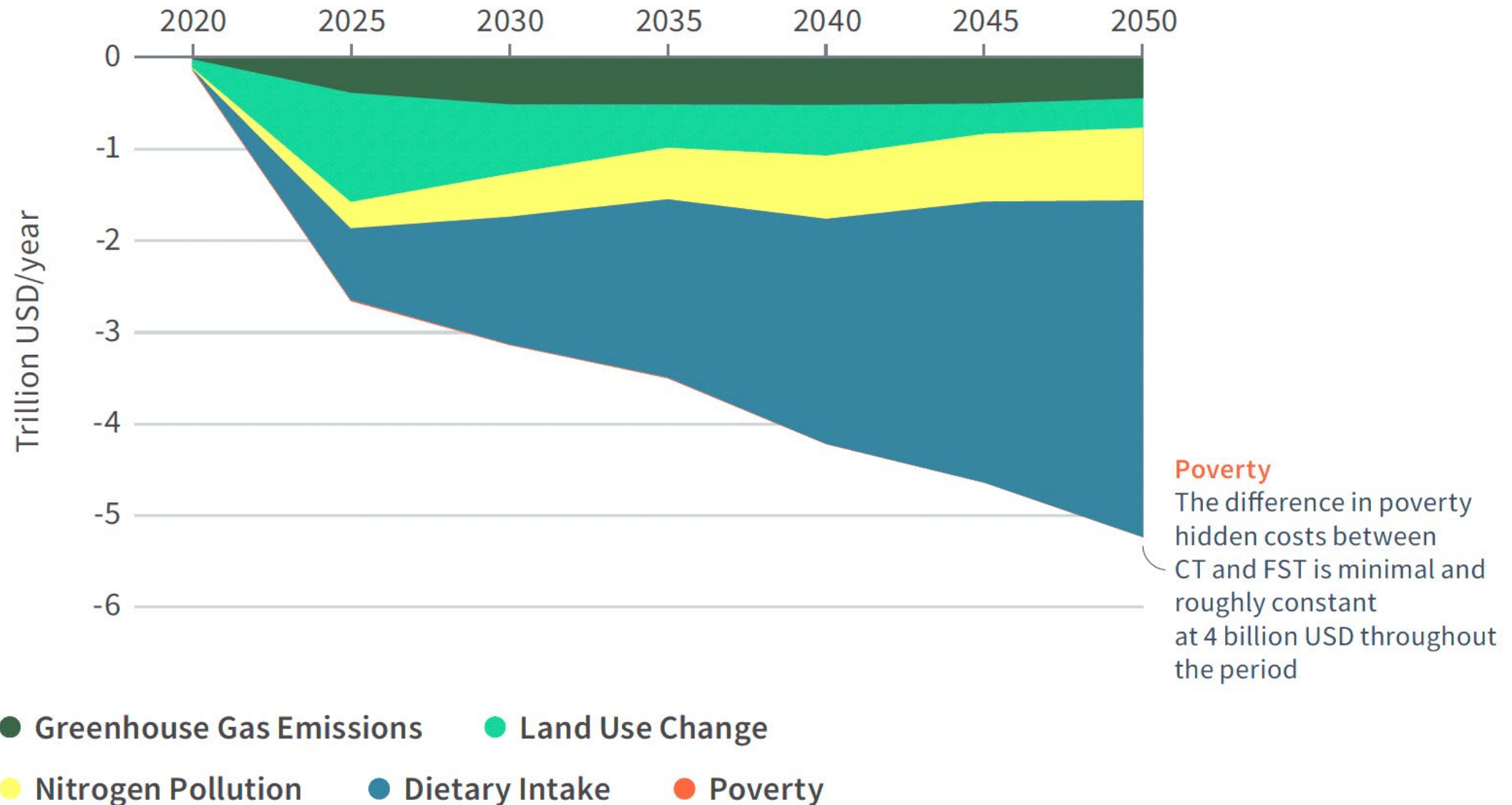


2.4C Legume, fruit, nut, vegetable intake



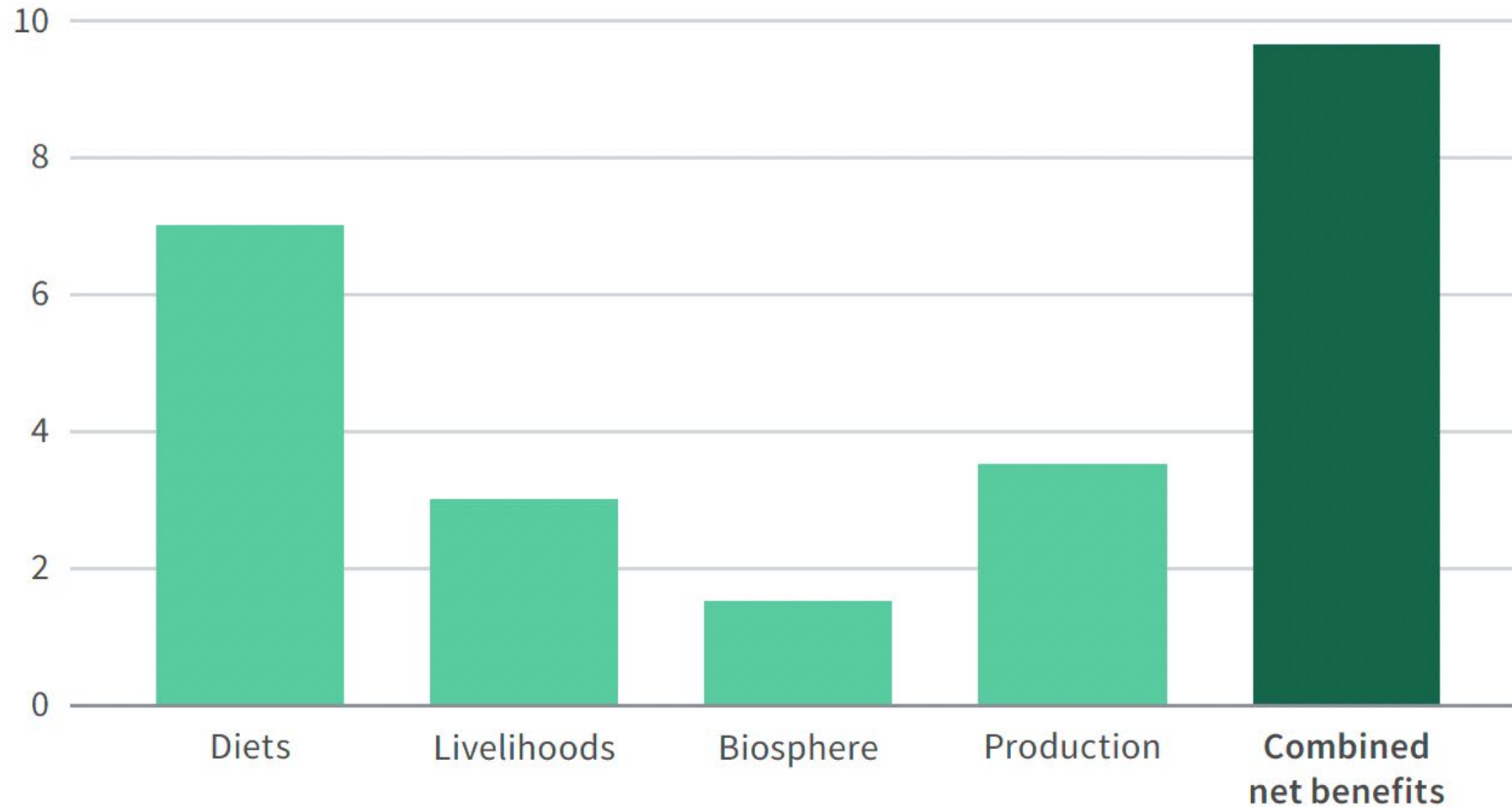
Reduction in hidden costs compared to Current Trends

Trillion USD PPP 2020

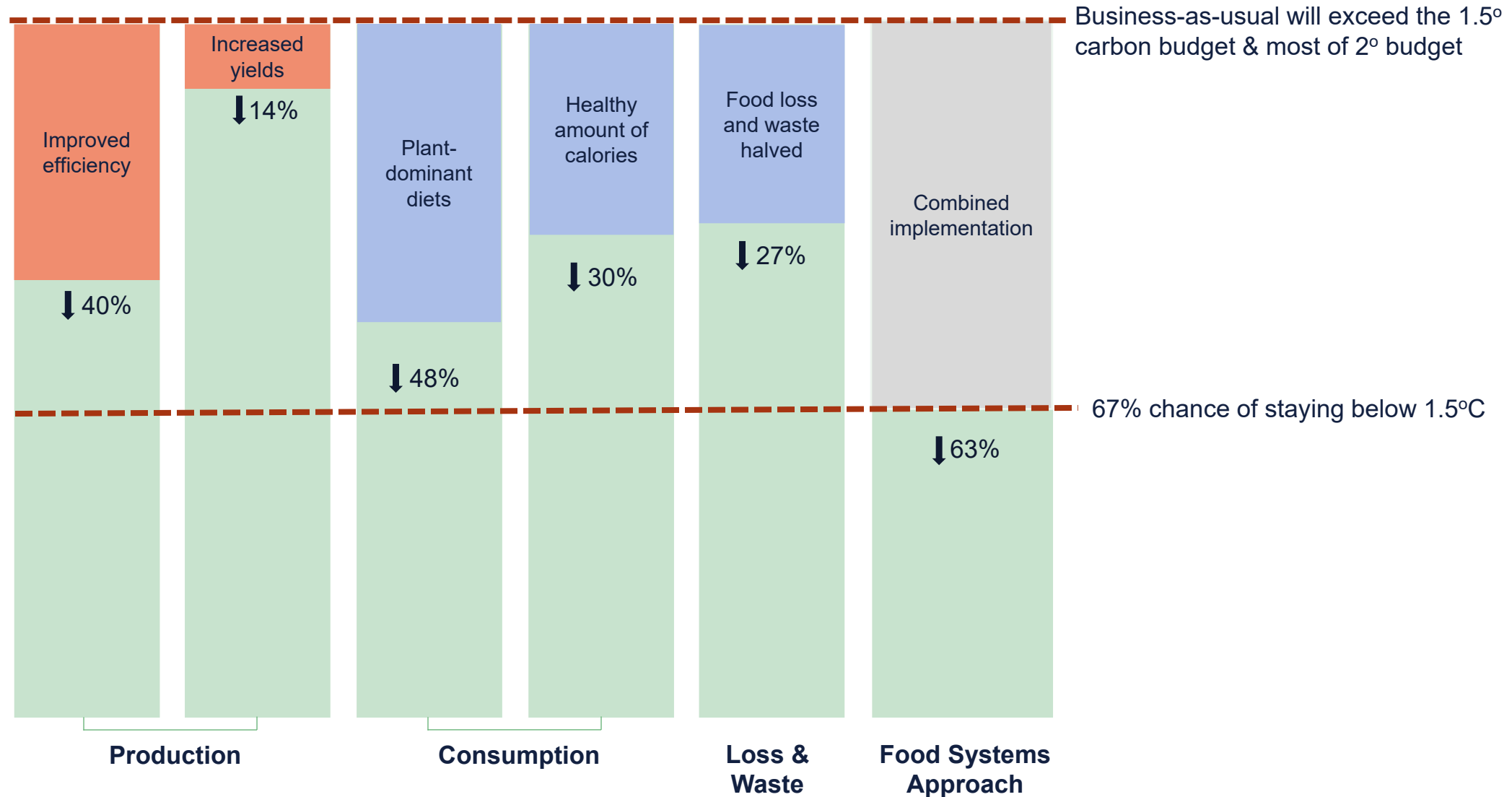


Net benefits of the FST compared to Current Trends, when implementing separately bundles of measures and overall, top-down approach

Trillion USD PPP 2020



Achieving the Paris climate change targets requires multi-level food systems action



Changing diets may be critical...
... but it's not easy.





- **Incentives and regulations** – taxation, subsidies, public procurement, FOP labeling & regulating advertising

- **Innovation** – reformulation, alt-proteins, other innovative food products

- **Investment** – infrastructure, skill development

Dietary change is **essential**
for unlocking the benefits of food system
transformation.