

Global Food Cold Chain Council

Expanding the food cold chain for a healthier planet

Challenges and Business Opportunities for Cold Chain
Development
International Conference on Sustainable Cooling
Washington D.C.
November 29, 2018



Global Food Cold Chain Is Complex: Inadequate or Inefficient Links Lead To Waste



*“...if food waste was a country by itself, it would be the third-largest emitter of greenhouse gases **behind** China and the United States.”*



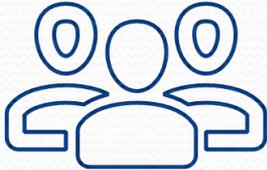
**ONE
BILLION**

METRIC TONS OF
FOOD IS LOST OR
WASTED, NEVER
MAKING IT FROM
FARM TO FORK.



**1/3 OF
FOOD**

PRODUCED EACH
YEAR IS NEVER
EATEN.



**OVER 800
Million**

PEOPLE ARE
CHRONICALLY
HUNGRY.



**FOOD
WASTE**

HAS DEVASTATING IMPACT
ON THE ENVIRONMENT

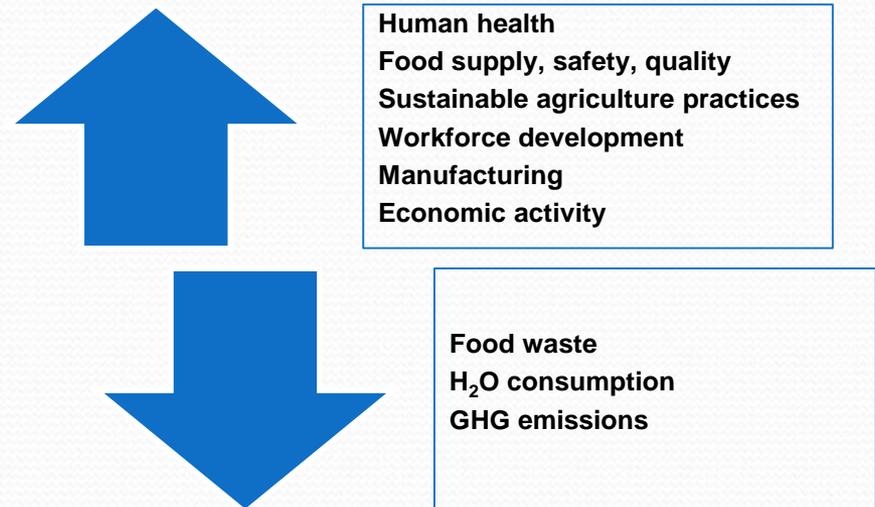
Water waste
Creation of greenhouse
gas emissions



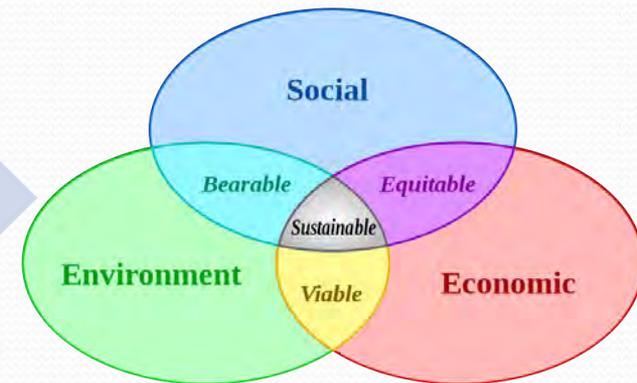
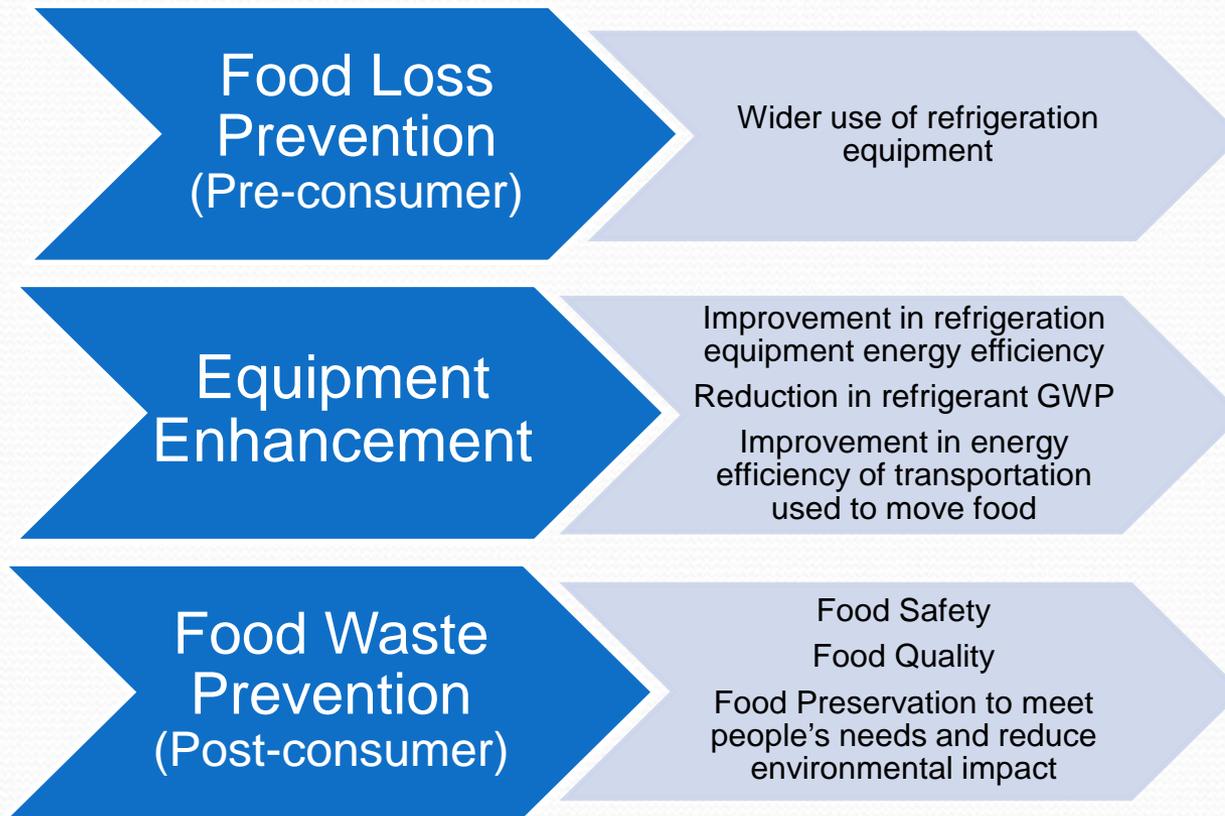
An Industry-led Initiative



- UNSG Climate Summit, New York City, September 2014: a coalition of major companies from around the world launch the **Global Food Cold Chain Council (GFCCC)**
 - to reduce greenhouse gas emissions in the processing, transportation, storage and retail display of cold food and
 - to stimulate global demand for energy-efficient low-GWP technology
- GFCCC committed to work with UNEP's Climate and Clean Air Coalition (CCAC) to advance broad-based public-private collaborative solutions to reduce HFC emissions in the food cold chain
- Successful implementation will generate economic and social value from:



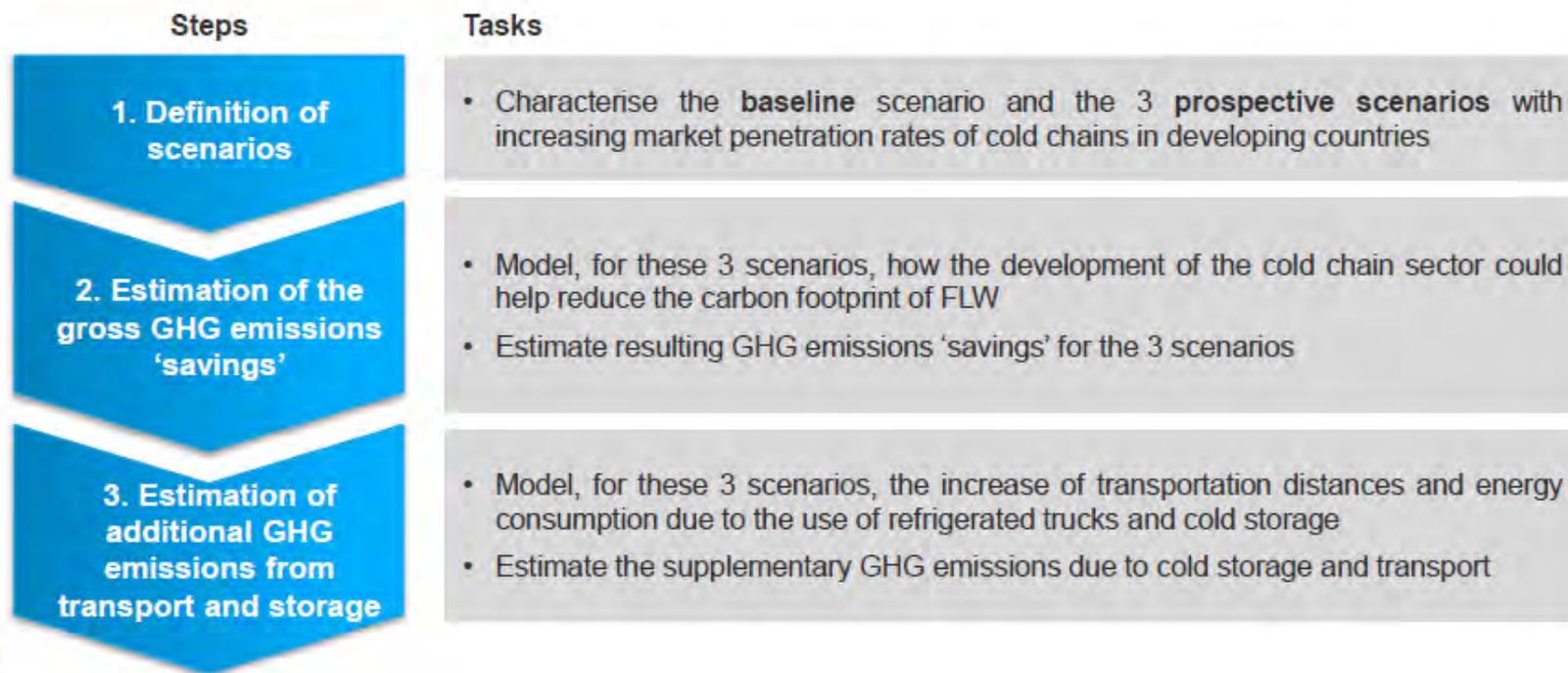
A Sustainable Food Cold Chain: An Economic, Social and Environmental Net-Positive



DELOITTE Food Cold Chain Research

Description of methodology

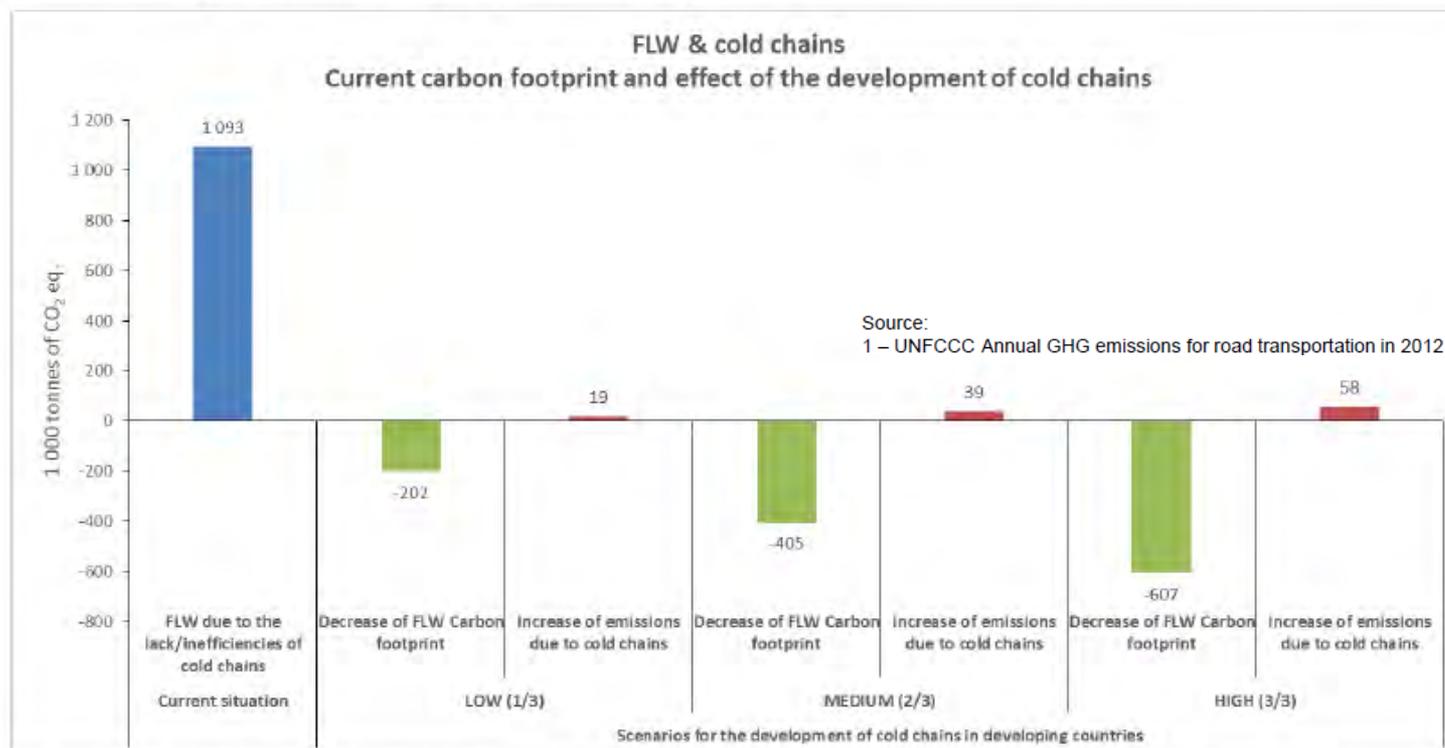
A three-step approach to estimate the potential GHG emissions 'savings' through the development of cold chain



DELOITTE Food Cold Chain Research

Results from the model (1/3)

According to the model used, in all prospective scenarios, the decrease of FLW carbon footprint from cold chain expansion clearly outbalances the newly created emissions, by a factor 10 approximately.

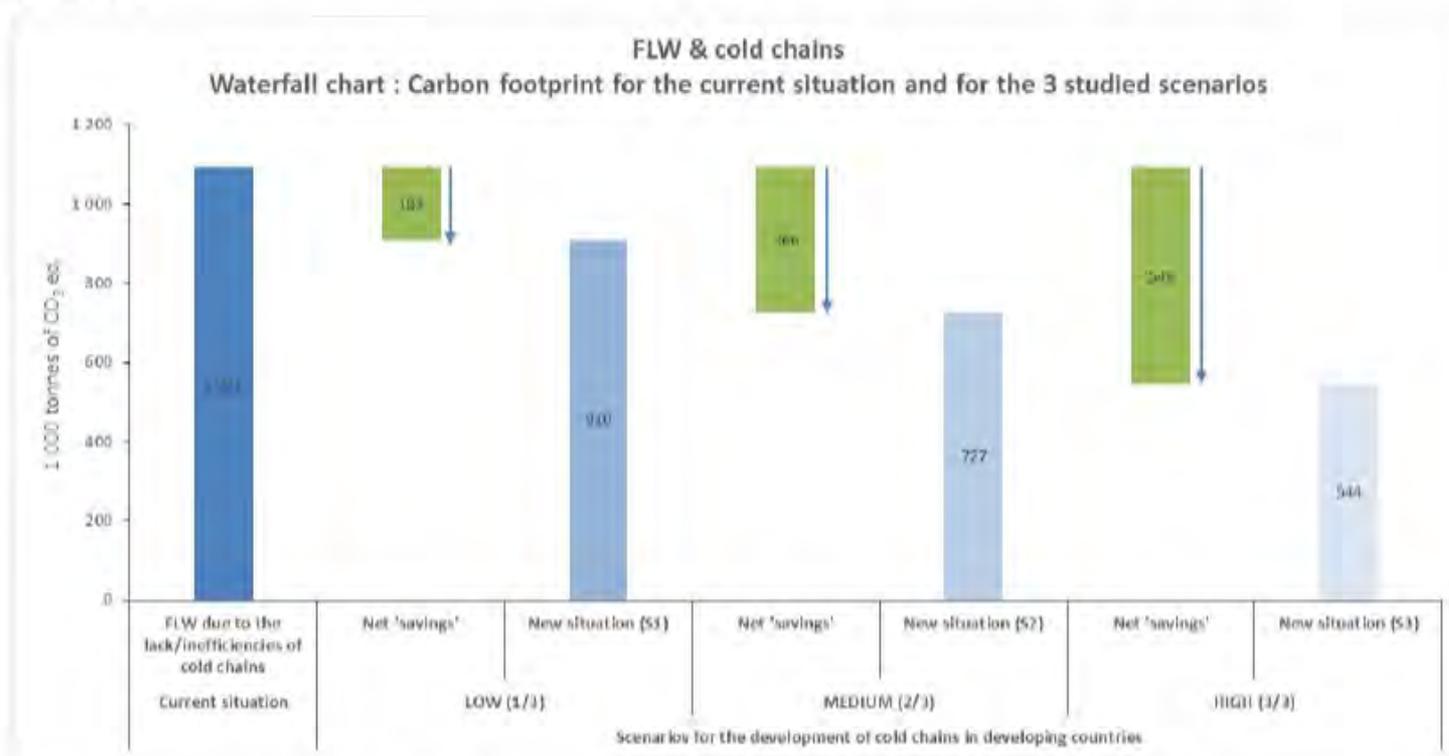


The total amount of food wastage in 2011 has generated about 1 Gtons of CO₂ equivalent, an amount comparable to the total GHG emissions of road transportation in the EU (0.9 Gt)¹.

DELOITTE Food Cold Chain Research

Results from the model (2/3)

According to the model used, net GHG 'savings' are observed for the 3 prospective scenarios

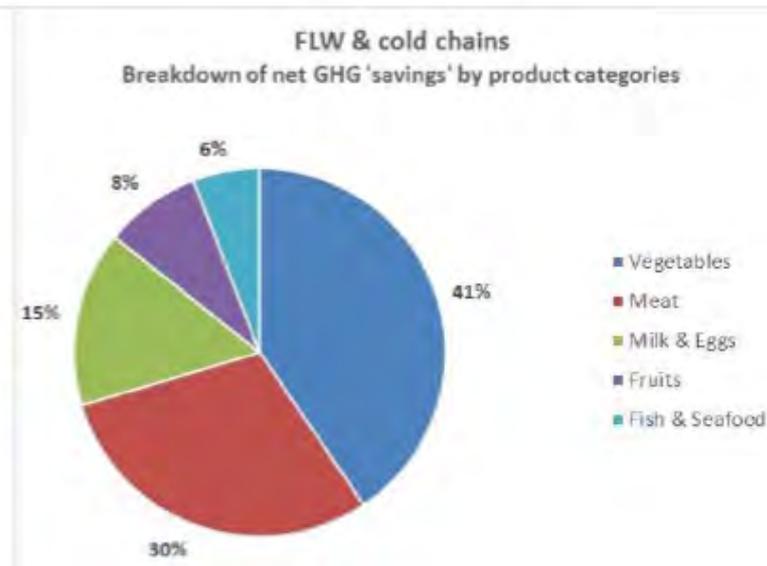
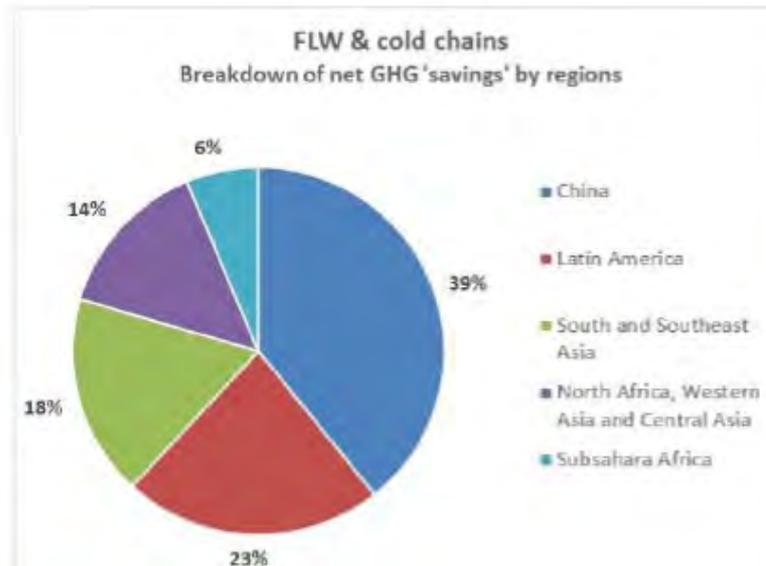


In scenario 1, the net GHG 'savings' would represent circa 180 Mtons of CO₂ eq. In scenario 3, the net 'savings' would represent circa 550 Mtons of CO₂ eq. As an illustration of the magnitude of these results, they can be compared to the total emissions of France – i.e. circa 450 Mtons of CO₂ eq. in 2012¹.

DELOITTE Food Cold Chain Research

Results from the model (3/3)

Breakdown of net GHG 'savings' by regions / product categories



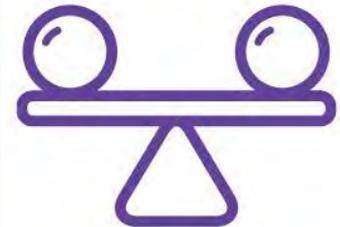
Cold Chain Customers Want*



Simple



Sustainable



Stable



Serviceable



Secure



Smart



* Emerson's supermarket owners/operators market research, 2017

Contact

Kevin Fay, Executive Director
fay@foodcoldchain.org

Juergen Goeller, Co-Chair
juergen.goeller@utc.com

Rajan Rajendran, Co-Chair
rajan.rajendran@emerson.com



Global Food Cold Chain Council
2111 Wilson Boulevard, 8th Floor
Arlington, VA, USA 22201

+1(703)841-0626

@FoodColdChain

