

The Cool Move is a central and digital “food cold chain transition hub” for cold chain investments in emerging markets, which is market driven and aimed to scale with impact on the ground.

It works by establishing a multi-stakeholder partnership among the different actors in the food system. The aim is therefore to take more of an ecosystem approach to grow a sector and not just run a program. This will help drive development of a sustainable cold chain.

# Cool Move: Building Sustainable Cold Chains in Emerging Markets

## Background

As markets develop and grow in low- and middle-income countries, they move from informal to more formal arrangements, including supply and demand agreements and contracts. Once supply chains become longer, more developed, and complex, there is an increasing requirement for cold storage and logistics to ensure food meets market requirements and there are minimal losses in the system. At this point, there is a need for cold chain infrastructure and demand for the level of investment needed to build that infrastructure. However, getting the timing and nature of cold chain investment right is challenging – if the investment is made too early or for the wrong food types, then there is insufficient demand for the infrastructure which is then unused, becoming a “white elephant”. If the investment is too late, then market development is hampered, and food is lost in the food system.

There are a large number of inter-linking elements which need to be in place for an investment to be successful and for it to be sustainable, not requiring ongoing ‘grant’ or government support. The Cool Move initiative has been set up to help ensure that investments have all the pieces in place required for ongoing sustainability.

# The Cool Move integrates cold chain to reduce food losses and boost food security in emerging markets.

We do this through integrating clean and energy-efficient cold chain (accessibility and utilisation) in fresh value chains in rural areas, by creating the ideal environment for investment and entrepreneurship.

The aim of the Cool Move initiative is to create a central “food cold chain transition hub” that catalyses the delivery of:

- Double the cold chain footprint and utilization in the countries involved in the next 5 years
- Double it again in the following 5 years
- A year-on-year 10% decrease in post-harvest losses

## The Cool Move will connect the dots, functioning as a transition hub.

The Cool Move initiative will provide an umbrella structure to connect the dots among existing projects and across the entire sector, functioning as a transition hub, which will bridge global institutions, funds, philanthropic institutions and others with local (integrated value chain) projects and businesses. This will create the ideal enabling environment for local entrepreneurship and investments.

There are a number of key interdependent pillars which each have specific objectives and plans to create the ideal enabling environment. These are:

- Business (model) development
- Data gathering and impact measurement
- Financing mechanisms
- Identify sustainable technology options
- Government and policy engagement

This will enable businesses to scale, ensure that new interventions can be ideated to complement the current players, technologies and instruments. It is important that projects contribute to the growth and development of the sector and that they are evidence based with sustainable business models meeting the growing market demand.

Close involvement of the private sector and industry actors is central to the Cool Move initiative. The hub will collaborate and coordinate with new and existing **in-field projects and SMEs.**



## The Food x Energy Nexus

Cool Move is the first initiative to bring **food & energy efforts together** and will become the focal point for many parallel initiatives. It will provide an umbrella structure to **connect the dots** between existing projects, enable them to scale, and ensure that new interventions can be ideated to complement the current players and instruments.

### The Cool Move transition hub offers:

- A business development tool for SME's (*including methodologies, best practices, benchmarking, scaling strategies & a guide for attracting funding*)
- A pipeline of investments in cold chain
- A financing & de-risking mechanism and 5 deals in the coming 2 years (*involving both public and private sector*)
- A (food) cold chain database (*including, country focused assessment financial & risk data, Ag-system data, food loss data and GHG emission data*)
- A policy recommendation book (*covering, for example, food safety, food quality and climate resilience*)
- Case studies covering different technologies

### Activities include:

- Facilitating sharing of best practices and learnings
- Maintaining expertise in key cold chain aspects, including understanding the level of cold chain development within specific countries, the level of demand for infrastructure, and the best practice in cold chain technologies and their application
- Maintaining expertise and knowledge about key aspects of successful business models
- Supporting the development of appropriate government policies to facilitate the development of cold chain infrastructure
- Providing a framework for projects to be developed and implemented in line with the existing best practices and providing evidence for future investments



Photo Credit: Curt Carnemark / World Bank

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## **GHG emissions**

The growing population, urbanization and rising disposable income level in developing countries, is driving the exponential growing demand for cold chains. This in turn, is associated with a projected rapid increase in cooling-related energy demand and greenhouse gas (GHG) emissions associated with both GHG-intensity of electricity grids and refrigerant in cooling equipment, putting pressure on already strained energy systems and hampering efforts to curb climate change.

## **Investments**

At this point, there is a need for cold chain infrastructure and a demand for the level of investment needed to build that infrastructure. An interesting development in the Energy Access domain, is the increased attention for the Productive Use of Energy, including cold chain for agriculture. However, getting the timing and nature of cold chain investment right is challenging – if the investment is made too early or for the wrong food types, then there is insufficient demand for the infrastructure which is then unused, becoming a “white elephant”. If the investment is too late, then market development is hampered and food is lost in the food system.

There are a large number of inter-linking elements which need to be in place for an investment to be successful and for it to be sustainable, not requiring ongoing ‘grant’ or government support. The Cool Move Initiative (CMI) has been set up to help ensure that cold chain investments have all the pieces in place required for ongoing sustainability. CMI will also share best practice learnings from efforts to create effective demand 'pull' and address the problems from market information to warehouse practices to transport costs.

## **Cool Move partners:**

The Cool Move is led by a consortium of leading institutions and collaborates with local partners. Founding partners include World Resources Institute (WRI), The World Bank, The Food and Agriculture Organisation (FAO), Rabobank, Enviu, Efficiency for Access, Wageningen University & Research (WUR) and the Global Food Cold Chain Council (GFCCC)

## **Get involved in the Cool Move Initiative now!**

We're calling upon the sector to be involved, and are looking for a range of stakeholders:

- Local entrepreneurs (technology providers as well as users, such as aggregators etc.)
- Investors, funders and foundations (both for the initiative and for the local entrepreneurs)
- (Local) government actors
- Data providers and research institutions
- Local banks

For more information, please get in contact with us at [FoodLossandWaste@wri.org](mailto:FoodLossandWaste@wri.org) and [eastafrika@enviu.org](mailto:eastafrika@enviu.org).