# COLD CHAIN EQUIPMENT OPTIMISATION PLATFORM

BOARD MEETING Alan Brooks, Alex de Jonquières, Lauren Franzel 10-11 June 2015, Geneva



# The problem: How to achieve coverage & equity objectives when...

60%

of fridges frequently expose vaccines to excessive heat and / or cold

90%

of cold chain deployed is out-dated technology

20%

of cold chain devices are **not functioning** 

20%

of facilities that need cold chain **don't have it** 



Note: Estimations for 55 countries eligible for platform funding (excluding India) **Source**: CCEM data, country data, WHO, NPHCDA, team analysis



# There are clear cold chain equipment market failures

#### Today

#### **Tomorrow**

**Funding** 

\$50M annual funding gap

 Increased dedicated resources for optimal CCE

**Demand** 



 Unpredictable demand, fragmented procurement and funding, choices driven by familiarity and procurement cost  Predictable planning and strategic forecasts, consolidated procurement and coordinated funding, informed choices based on performance and lifetime cost

Supply



 High upfront costs for optimal equipment, limited incentive to develop and market new technologies, insufficient feedback on device performance  Cost reductions, accelerated technology upgrades through manufacturer incentives, greater visibility into device performance



### CCE optimisation platform will...

 Increase and coordinate CCE investments to improve coverage and equity and better protect vaccines



 Strengthen systems with more efficient, sustainable, and reliable technologies at lower lifetime costs



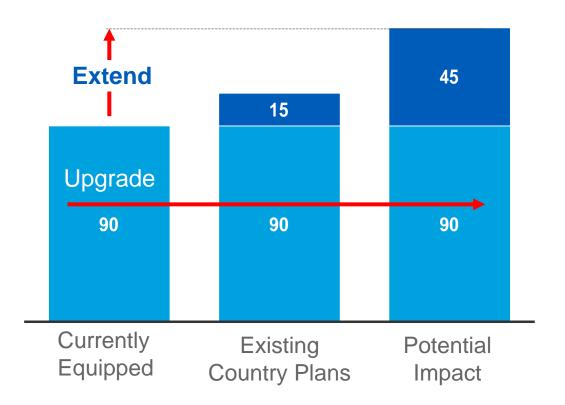
 Build on other supply chain and health system interventions including management and maintenance of CCE





## Extending reach & performance to support coverage & equity

Impacted facilities across Gavi-eligible countries (excl. India) '000





The existing support is not enough. [The platform will] provide fridges to facilities that currently have none. This will enable to vaccinate more children! (Gavi country EPI Manager)

**Source:** CCEM, Country EVM assessments (2011-2014), IEA, World Energy Outlook 2012, Interviews with Country SCMs and external consultants, team analysis



### Platform design (1)

### Technologies supported

- Devices supported include: Solar direct drive refrigerators, passive cooling devices, vaccine carriers, cold boxes, freezers
- Accessories included: Voltage regulators, temperature monitors, spares

### Operating model

- Co-investment by countries tiered based on GNI groups
- Multi-year commitment to enable strategic planning
- Use HSS mechanism to make easier and increase uptake
- 2016 as "scale up year"



## Platform design (2): Maintenance approach addresses underlying problems

#### **Preventative Maintenance**

#### Corrective Maintenance (Repairs)

Anticipated critical maintenance activities

 Basic preventative care (health center staff, monthly)

Regular checks (technician, yearly)

 Repair broken devices including replacement of spare parts (technician)

Incentivise appropriate equipment

Shape market so manufacturers build in features mitigating most common causes of failure (e.g., voltage regulator)

Establish platform requirements

Require national maintenance plan including provider, budget, and funding

Require manufacturers to deliver, install and train end users

Bundle spare parts and warranty

And...

Monitor device performance, explore performance-based incentives Consider additional innovative maintenance interventions



# PPC recommendation to the board



- (a) <u>Approve</u> the creation of an innovative mechanism to strengthen country cold chain systems and advance the Alliance's Supply Chain Strategy and, ultimately, its coverage and equity goals (the "CCE platform"), the design of which is set out in Section 8 of Doc. 15 and includes a funding model tiered by country GNI level;
- (b) **Note** that an amount of US\$50 million (to be reassessed and potentially increased based on initial applications to the CCE platform) will be allocated from the strategic initiatives resources pledged for 2016-20 (which envisage funding to strategic initiatives to realise Gavi's new strategy) to launch the implementation of the CCE platform and fund the initial applications in 2016-17 and **request** the Secretariat to report back to the PPC and to the Board in 2017 on the implementation of the CCE platform.



### **THANK YOU**





### Country CCE management process (simplified)

#### **Utilise country and Gavi support processes (i.e. PEF)**

- Conduct CCE inventory & facility segmentation to identify needs (replacement and equipping new facilities)
- Translate needs into a **CCE plan** (type of devices, number, phasing of deployment, maintenance plan) as part of national immunisation plans

#### **Apply for platform support**

- Use HSS window, with exceptions in years 1-2
- Co-invest existing CCE resources with platform, tiered by GNI (50-80% of total purchase value)

### **Procure through existing mechanisms**

 Delivery, installation, end user training and spare parts provision responsibilities of manufacturers

Manage and maintain devices with reporting on functionality

