

# How can the HVAC-R industry contribute to achieving the Sustainable Development Goals?

## A Global Finance Perspective

June 11 2019



*Creating Markets, Creating Opportunities*

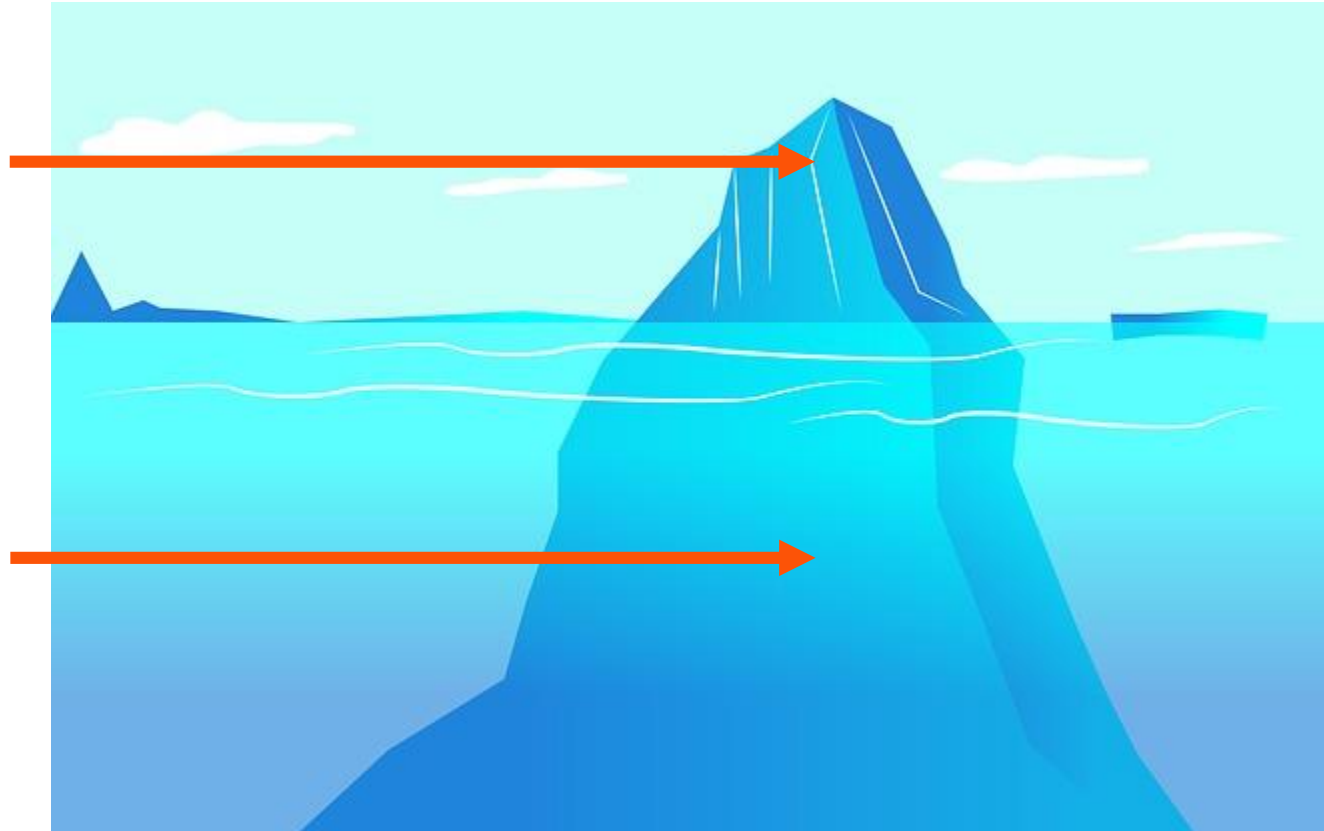
# WORLD BANK GROUP



# MOVING THE WHOLE OF THE FINANCIAL SECTOR

WBG Balance Sheet  
can support a sliver of  
necessary finance

Other players have to  
step up!!



# A VARIETY OF FINANCING MECHANISMS IS AVAILABLE





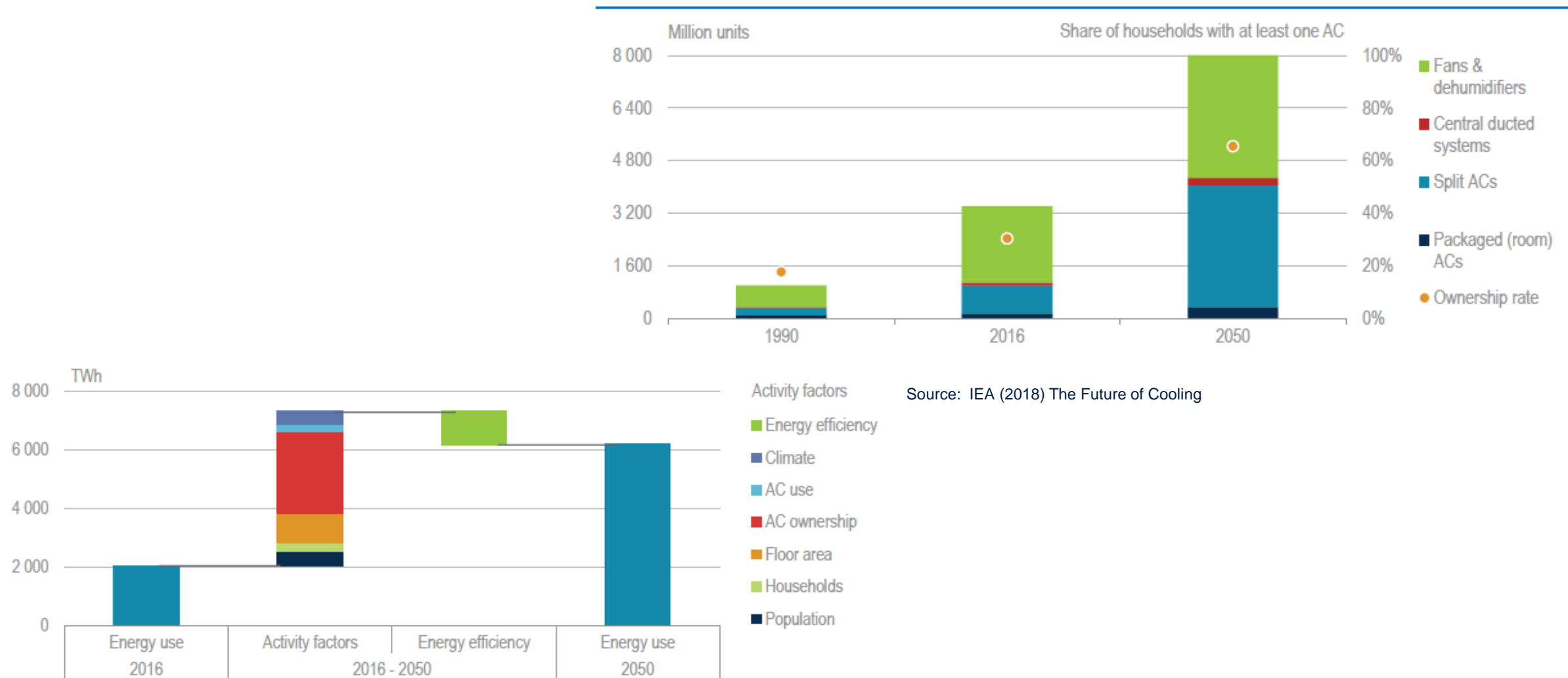
# ROLE OF FINANCE (WBG) IS MORE THAN JUST MONEY



Asif Iqbal, Deputy Director,  
Bangladesh Bank:  
“Sustainability will not be  
achieved unless and until the  
flow of finance can be driven  
towards the sustainable  
business practices.  
Innovation is the only way to  
make the sustainable  
transformation of finance.”



# WHY IS THE WORLD BANK GROUP INTERESTED IN THE COOLING AGENDA?



## ANOTHER DIMENSION OF RISK – PRODUCTIVITY LOSSES

- Increasing temperatures have a significant impact on human productivity as well as health and safety.
- In a factory case study in India almost 30% of workers in a glass works suffered from heat exhaustion on a regular basis
- Research in Sweden and New Zealand, heat causes workers to reduce work intensity or take more frequent breaks to avoid heat exhaustion and heat stroke. This reduces productivity and economic output.

Productivity loss data for some countries:

Country	2010	2030	\$ value lost
Bangladesh	1.5%	3%	30bn
Ghana	3.2%	6.5%	15bn
Philippines	2.9%	5.9%	85bn
Vietnam	2.9%	5.7%	85bn

Potential for cooling to be a competitive battleground. A country being more proactive on regulations influencing cooling might be able to provide a competitive edge.

# CREATING A BUSINESS OPPORTUNITY OUT OF RISK



- Bangladesh garment sector responsible for 80% of export earnings. Is labour intensive
- Densely packed rows of sewing machines with motors that heat up.
- Washing and dyeing machines that are using quantities of steam.
- Halls are lit by regular strip lights that also emit heat and are responsible for the largest share of electricity consumption in a factory.

Reducing working temperatures has multiple benefits:

- Increase productivity,
- reduce material waste,
- reduce energy consumption
- Improves safety.

Air conditioning part of the answer together with better building design and architecture: passive lighting, better layout, switch to LED lighting all around, cool roofs etc

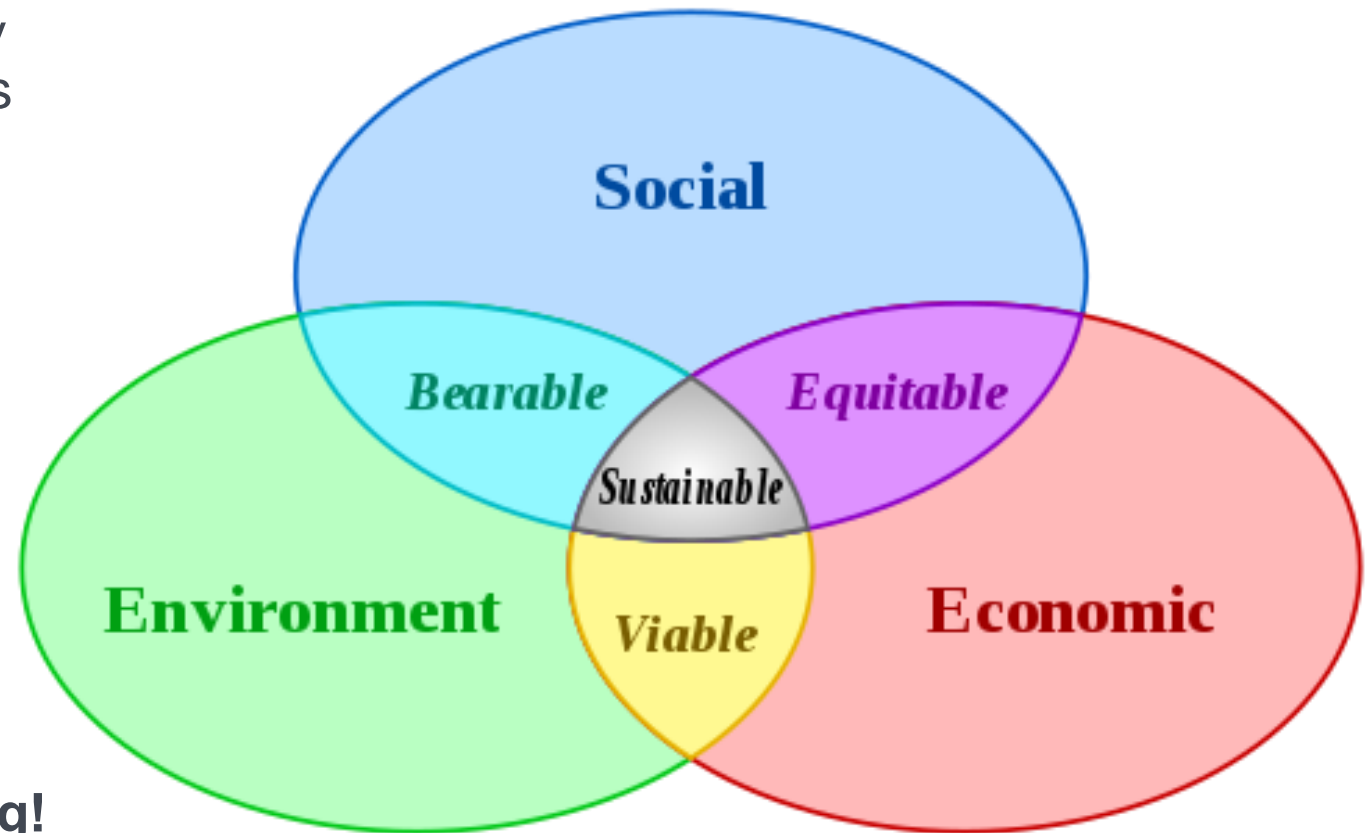


# THE NEED FOR A RESPONSIBLE INDUSTRY

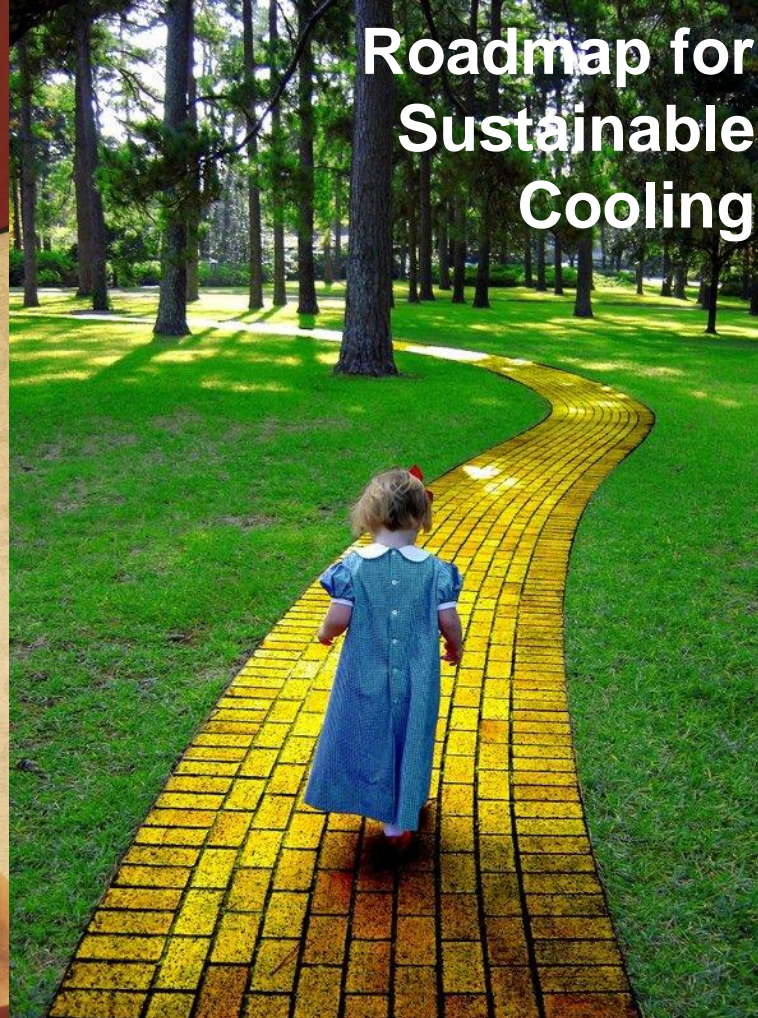
Climate is changing – is creating a huge growth opportunity for the HVAC-R industry especially in Africa and Asia. But this brings the need for innovation:

- Refrigerants
- Energy efficiency
- Business models
- Price points

**Sustainability is increasingly a core decision criterion for responsible lending!**



# THANK YOU



Ian Crosby  
Principal Operations Officer  
[icrosby@ifc.org](mailto:icrosby@ifc.org)