



المجلس الأعلى للبيئة
Supreme Council for Environment



Bahrain- Kuwait- EPEE- UN Environment



Bahrain – Kuwait HFCs Outlook

Visualizing Scenarios for Envisaging Actions

Managing mixed challenges for high ambient temperature (HAT) countries

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HAT Countries and Alternatives... Characteristics

1. Refrigeration and Air-Conditioning are vital sectors for HAT countries. They consume 50+ % of power demand as minimum reaching to 70% in some countries during peak times.
2. EE Programs (MEPS) are progressing and advancing in very quick manner compared to the work on finding and deploying sustainable alternatives to HCFCs.
3. Harsh climatic conditions impact on lifetime of RAC equipment and installation, hence annual demand is above normal averages.
4. Many HAT countries have new visionary development plans for 2030 goals, hence several mega projects are in pipeline with the need to new RAC installations.

HAT Countries and Alternatives... Technicalities

1. Although research, funded by MLF, on examining low-GWP alternatives and similar work by industry and institutes is progressing positively; but we still at research level and didn't yet move to actions.
2. Commercial availability of components with low-GWP alternatives suitable for HAT conditions is one of the big challenges in terms when and how...
3. In addition, size of units being used in local market is larger than what can accommodate lower-GWP alternatives at the time being given design safety standards
4. Finally, the longer list of options (refrigerants) for each category of applications is making the market analysis and forecasted actions very complicated given the extended possibilities and differences amongst different sectors

How the Model will Assist

1. Detailed understanding of the directions in each sub-sector
2. Ability to discuss in depth with each technical group the needs of each sub-sector based on solid analysis and realistic forecasts
3. Building the linkage with Stage-II of HPMPs i.e. post 2020