

UNIDO ATMOSphere Technology Summit 2013

„Natural Solutions for Developing Countries“

03. June, 2.00 – 3.00pm

Road map of HFC phase out

Jürgen Brenneis
Red Bull GmbH



Clever cooling vs. global warming

Refrigerants, Naturally! is a global initiative of companies taking action to combat climate change by replacing fluorinated gases in refrigeration equipment with climate-friendly natural refrigerants.



PEPSICO



Supported by  **UNEP** and **GREENPEACE**



- **Members**

- The Coca-Cola Company
- PepsiCo
- Red Bull
- Unilever

Supporters

- UNEP
- Greenpeace



PEPSICO



Supported by  UNEP and **GREENPEACE**



- **Focus on replacing F-gases in refrigeration systems**
 - only with natural refrigerants, including ammonia (R-718), carbon dioxide (R-744) and hydrocarbons (R-600a, R-290, R-1270)
 - particularly in commercial retail equipment

Efforts on overcoming barriers to accelerate the global transition to natural refrigerants their use in energy and resource efficient refrigeration and cooling systems



PEPSICO



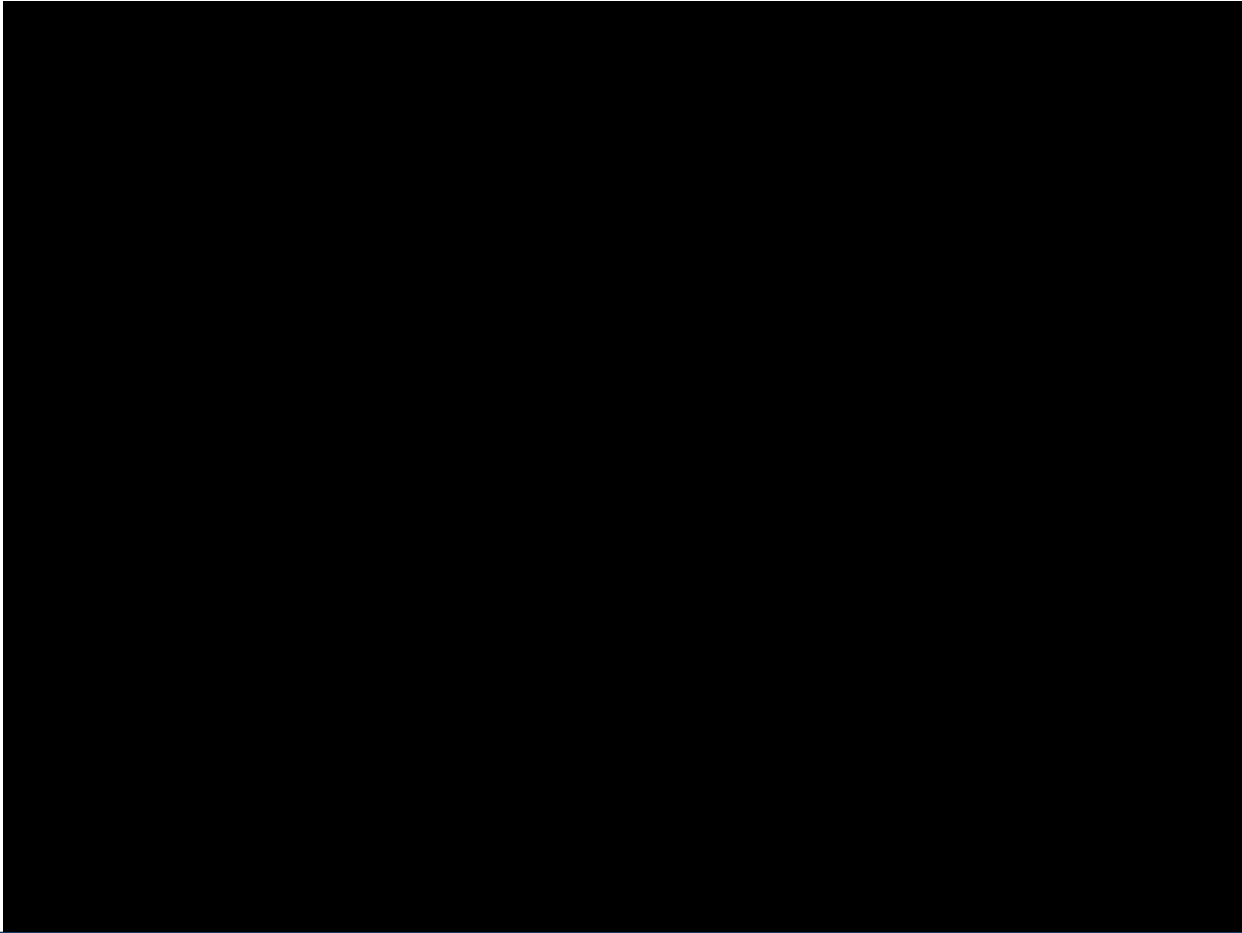
Supported by  UNEP and **GREENPEACE**





- Member companies have collectively
 - placed more than 2.5 million HFC-free refrigeration units in almost all countries around the world and
 - phased out more than 1 million tonnes of CO₂ emissions equivalent based on the avoided HFC refrigerant emissions.



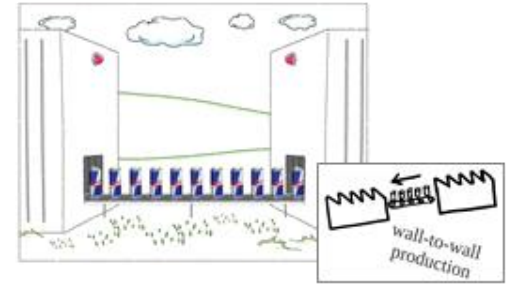


PEPSICO


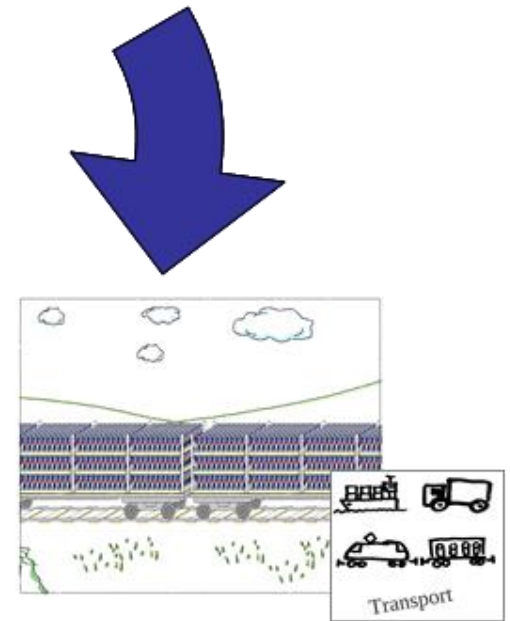


Supported by  and **GREENPEACE**





COOLING CAN BE RESPONSIBLE
FOR UP TO **20 %** OF OUR
PRODUCT CARBON FOOTPRINT

- What was our objective back in 2008?



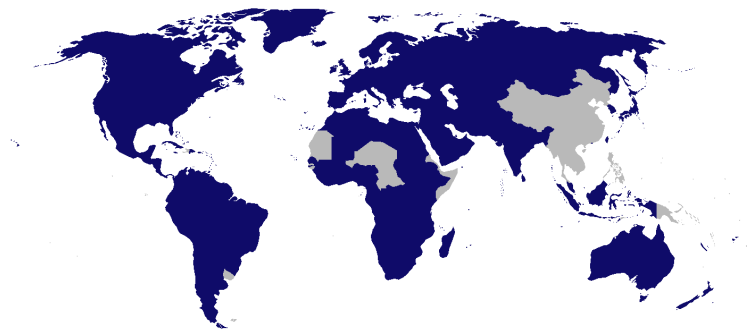
Use the most efficient and environmental friendly technology for commercial refrigeration



- What we had to do?
 - Replace HFC's by natural refrigerants
 - Replace fluorescent tubes by LED light
 - Use energy efficient fans
 - Use high efficient condenser
 - Electronic controller – Cooler Mgmt.
 - Night curtain for open-front/top cooler



- Facts & figures
 - 165 countries worldwide



- Global Cooler fleet 890.000units
- ECO Cooler : 313.000units
- 100% HC procurement in 2014 except Japan and R600a for USA



• Our challenges

- After Sales capabilities in developing countries
 - Infrastructure Investment
 - Filling station and safety equipment
 - Service partner training
- Components availability (110V - 220V/60Hz → HC refrigerant)
- Approvals and Certificates
- Legal & Trade Barriers*
- HC Approval for the US
 - R290a & R600a
- End-Of-Life (Scrapping)





 **ATMO**
sphere
technology summit
natural solutions
3 - 4 June 2013 in Vienna

Thank you very much for your attention