

Natural Substances and UNIDO

Natural Solutions for Article 5 countries

November 14, 2012 Meeting of the Parties Geneva, Switzerland



PARTNER FOR PROSPERITY

UNIDO: Implementing Ozone and Climate Friendly Alternatives

Launch of first domestic First projects in China refrigerators using natural completed with significant refrigerants in Germany positive impact on ozone (794 ODP) and climate (3.3 mil. GWP) 1990 1999 1995 2010 71 UNIDO projects (completed and UNIDO initiates the introduction of ongoing) using natural alternatives in novel refrigerator manufacturing the refrigeration sector technologies using HC refrigerants and foaming agents in Article 5 countries – China as a pilot

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Working towards global acceptance of natural refrigerants

- UNIDO projects prioritize the use of natural refrigerants
- Actions for a concerted effort have to be taken to overcome actual barriers to natural refrigerant alternatives:
 - ✓ Financing and costs are lowered by more innovative solutions
 - \checkmark Safety issue can be overcome through increased knowhow
 - ✓ Technology processes can be enhanced through partnerships
 - Assistance to local governments to implement global standards (policy and safety) helps overcome barriers against natural refrigerants

Opting for mature and safe technology of natural refrigerants has a significant positive impact on ozone protection (Montreal Protocol) and climate change mitigation (Kyoto Protocol) versus the use of HFCs



Natural alternatives employed under UNIDO's HPMPs

RAC sector

- Hydrocarbons (iso-butane, propane)
- Ammonia
- Carbon Dioxide

Foam Sector

- Hydrocarbons (cyclo-pentane; isopentane; iso-butane; n-pentane...)
- Water
- Carbon Dioxide
- Supercritical CO₂

(Country examples: China, Bosnia-Herzegovina, Mexico, the Gambia, Viet Nam, Morocco...) (Country examples: Bosnia-Herzegovina, Qatar, Turkey, Philippines, Kwait, Ecuador, Egypt, Guatemala, Algeria, Iraq, Morocco...)



UNIDO ATMOsphere Technology Summit Natural Solutions for Article 5 Countries

June 3 and 4, 2013 at the Vienna International Centre

- Objective:
 - Provide businesses from Article 5 countries in the RAC and foam sectors with practical solutions for overcoming the challenges in the introduction of natural substances.
 - Showcase challenges and opportunities of natural substances with practical panels and real case studies from companies from developing countries.

• Audience:

- Technology suppliers
- Businesses in Article 5 countries
 - End-users / Servicing / Associations
 - Manufacturers



UNIDO ATMOsphere Technology Summit Natural Solutions for Article 5 Countries June 3 and 4, 2013 at the Vienna International Centre

- Focus on the real costs incurred for business owners when opting for natural substances as well as on the cost-effectiveness over time.
- <u>First day</u>: focus on barriers, incentives and costs as well as presentation of relevant case studies.
- <u>Second day</u>: focus on safety and training, which are usually seen as barriers to the introduction of natural substances, hydrocarbons in special. The Summit will illustrate with case studies how to overcome these barriers.



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Thank you

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