



工商制冷空调行业HPMP进展及替代技术的推广

Ozone2Climate Roundtable

9 April, 2015, Shanghai

第一部分：第一阶段HPMP的进展

Part one: progress of stage I HPMP in ICR sector

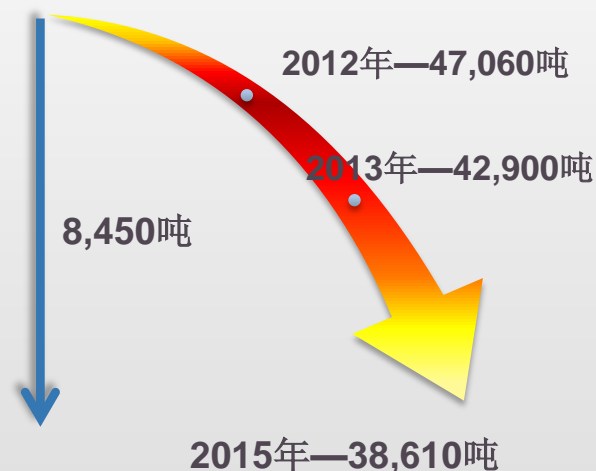


以2009年和2010年平均消费量为基线

Baseline is the average consumption of HCFC in 2009 and 2010

第一阶段的目标

基线 —42,900



目标

Target

2013年冻结，2015年削减10%

Freeze in 2013 and reduce by 10% in 2015

相当于淘汰HCFC-22实物消费量 8,450吨

Equivalent to 8,450MT HCFC-22 should be phased out

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行业计划

工商制冷行业计划于2011年7月批准，资金\$6,100万美元

The HPMP for ICR sector was approved in July 2011 with funding of US\$61million

概要

共分五笔支付，其中四笔已经获得批准，共计51,850,000美元

Four tranches of funds were approved by ExCom, totaled US\$51,850,000

Overview of stage one HPMP in ICR sector

将向今年第二次执委会申请第五笔资金

The last tranche will be applied at the last ExCom meeting this year.

	2011	2012	2013	2014	2015	Total
Sector agreed funding US\$	25,380,000	6,900,000	8,495,000	11,075,000	9,150,000	61,000,000

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共签署合同11个，分配资金3,245万美元

11 contracts signed. 32,450,000US\$ were allocated

生产线改造
活动

Conversion
of
production
lines

其中涉及改造的生产线25条，包括2条压缩机生产线和23条制冷设备生产线

25 production lines will be converted, including 2 compressor lines and 23 equipment manufacturing lines

产品主要以冷水机和单元机为主。技术方案为13条R32和9条R410a/R134a

The conversion mainly took place with unitary A/C and chillers. 13 lines will be converted to R32 and 9 will be converted to R410a/R134a

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技术援助 活动

Technical assistance activities

开展替代技术研究

Studies on alternative
technologies

R32技术应用的研究

Application of R32

自然工质制冷剂的应用研究

Application of natural refrigerants

推动标准的修订

Revision of standards

相关产品标准的修订

Products standards

国标9237的修订

National standard GB9237

举办培训班和技术研讨会

Training and workshops

举办两次项目实施培训

Two training workshops on project implementation

2013年11月，CO2技术研讨会

Workshop on CO2 technology in November 2013

2014年12月，环保低碳替代技术研讨会

Workshop on low GWP alternatives in December 2014

第二部分：替代技术推广活动

Part two: promotion of alternative technologies



1. 目前一些替代产品还存在政策障碍，无法商业化生产和大批量上市；
With restriction of standards, products with some alternatives cannot be commercialized

2. 替代技术的应用最终需要市场的认可，在用户端开展示范能够让市场更快地了解新技术，接受新产品；

The alternative technology need to be accepted by the market, it is the quickest way to demonstrate with end users and allow them to better know new technology and products

3. 热泵技术的应用可以为解决当前我国以燃煤为主的不合理能源结构进行有益地尝试，即有利于行业发展，又能为改善环境做出贡献。

It will demonstrate a solution to clean heating. It will promote the heat pump industry and eventually contribute to a better environment.



第二部分：替代技术推广活动

Part two: promotion of alternative technologies



天津市每年散煤用量约300万吨，用户120万
Small sized coal users in Tianjin is around 1.2million,
they consumes 3 million ton of coal per year.

2014年计划淘汰180万吨散煤，政府财政投入3.4亿元，
补贴民用炉具和清洁煤

In 2014, the government planned to eliminate 1.8m
tons of coal using 340million Yuan

推进困难，散煤600元/吨，清洁煤950元/吨

Difficult to implement, coal is cheap and easy to get



替代前



安装热泵



第三部分：近期工作

Part three: projected activities in 2015

继续开展生产线改造活动

Investment in conversion projects

技术研发活动

Technology research and development

替代技术推广

Promotion of alternative
technology

继续开展热泵技术采暖应用的技术示范，天津
Heat pumps in Tianjin

开展超市冷藏冷冻设备技术示范项目
CO2 technology in supermarket

开展冷链行业调研

survey to the cold chain industry

第二阶段HPMP的准备

Preparation of stage II HPMP



谢谢
Thank you !

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