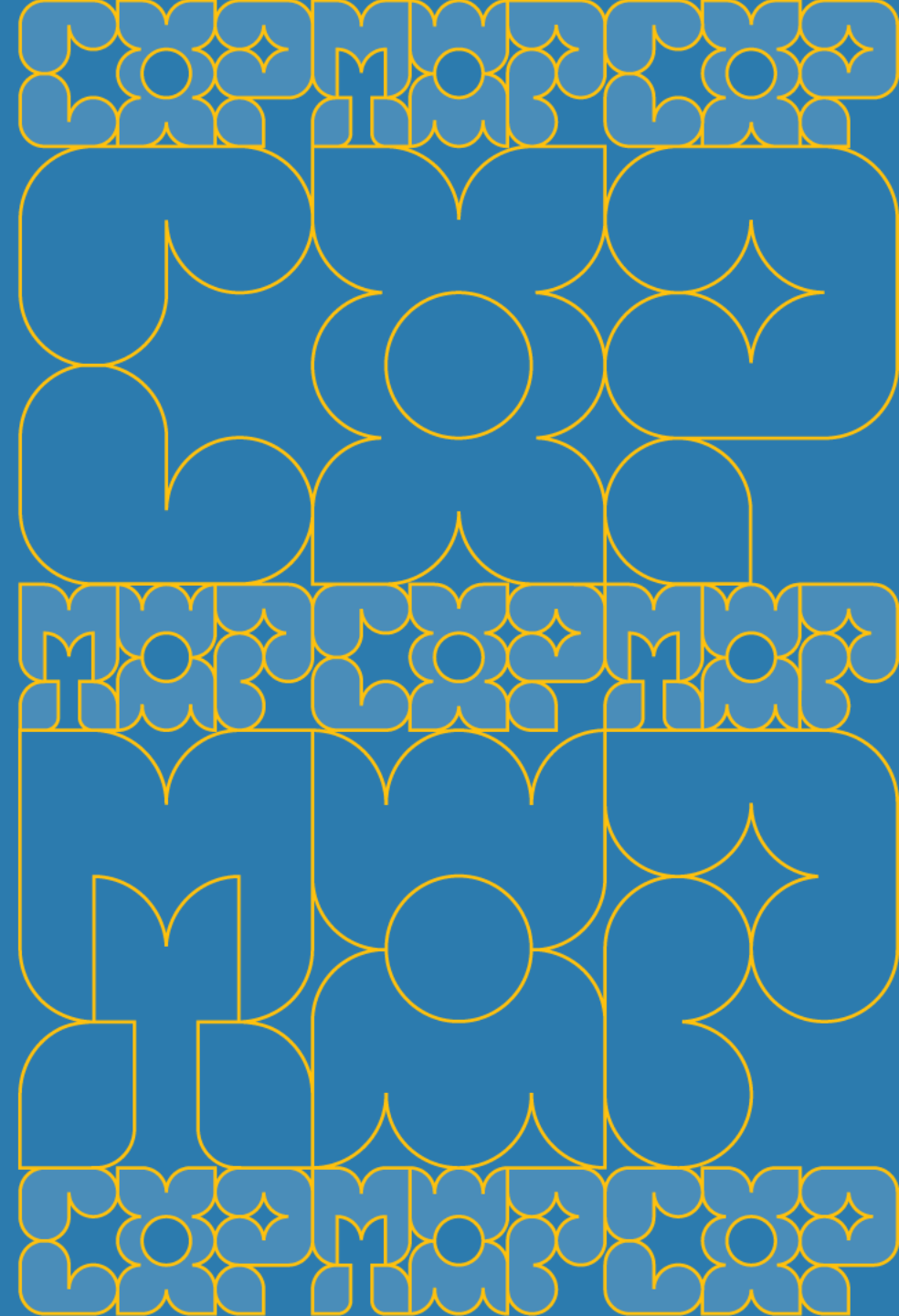


COUNTRY EXPERIENCES WITH LIFE- CYCLE REFRIGERANT MANAGEMENT

COUNTRY: **MEXICO**

SERGIO MERINO
NATIONAL OZONE OFFICER



Overview of National LRM Framework

- Legislation in place in the correspondent secretariats (Environment, Economy, Treasury, Transportation, Foreign affairs...) regarding leak prevention, disposal, handling used and waste equipment, but not specific regulation for ODS and HFC at decommissioning of equipment.
- Making sure existing regulation is enforced still a challenge.
- No EPR schemes. The General Law of Ecological Equilibrium and Environmental Protection (LGEEPA) establishes a shared and differentiated responsibility for all stakeholders in the supply chain and life cycle of products and services.
- Focused incentive programs in the past had provided a basis for the strengthening of LRM, but still not sustainable once the programs finished.

Implementation Experience and Key Actions

“Change your old one for a new one”

- RAC equipment replacement program (2009-2012): close to 1.7 million refrigerators and 200,000 AC units.
- Supported by two public funds. Customers paid the new equipment in installments via their electricity bills.
- Resulting ODS/HFC waste: R-12 (14.8 mt); R-22 (32.5 mt); R-134a (22.4 mt).
- CRRR network during the program: 104 collection and scrapping and 10 recovery and recycling of refrigerant centers.
- ODS Destruction Demonstration Project approved by MLF in 2011 (\$1.4m).



Results and lessons learned

- Exporting waste refrigerants for destruction was not possible (classified as hazardous materials under national legislation).
- Two alternative methods were used: argon plasma arc (2015/2016, 74 tons ODS) and cement kiln (2016/2017, 39 tons OSD).
- No significant destruction after 2017.
- By 2023 there were just 24 C&S and 7 RRR centers still in operation: no sustainable business model in the absence of a continuous flow of waste.
- KIP-I/HPMP-III/COPA activities will help: account/characterize SAO and HFC banks, strengthen RRRC network, increase F-gas recovery rates, explore extended/shared producer responsibility programs, develop circular economy models in the RAC sector, reduce cost of destruction of F-gases...
- Ongoing development of third alternative for destruction in rotary kiln.

Thank you!

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