



UNITED NATIONS  
INDUSTRIAL DEVELOPMENT ORGANIZATION



KIGALI in  
Action

# The Challenge

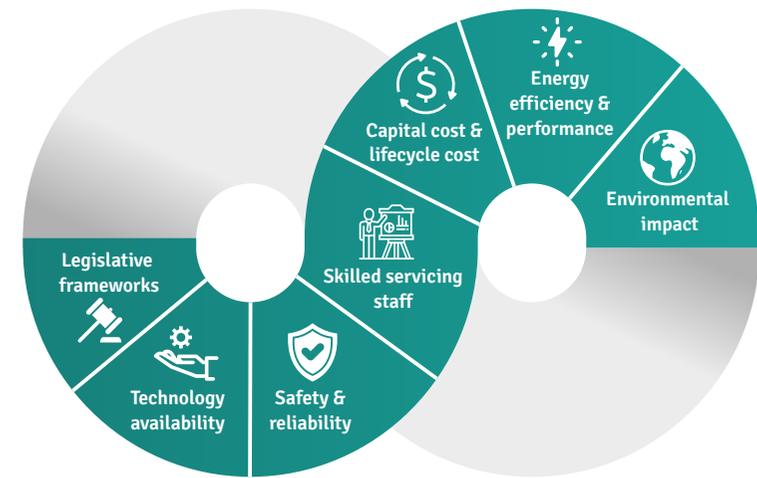
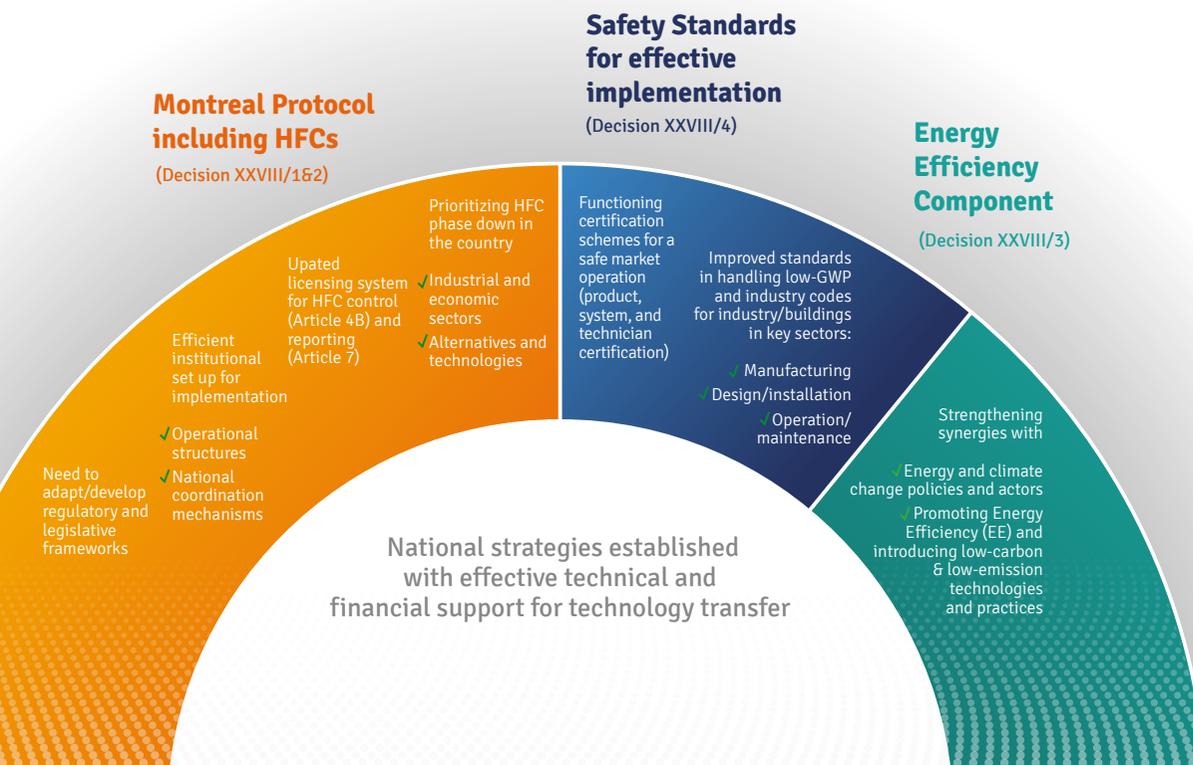
Over the last 30 years, we have worked to phase-out ozone depleting substances (ODS) under the Montreal Protocol, contributing to ozone layer protection and climate change mitigation. The Kigali Amendment (KA) adds hydrofluorocarbons (HFCs) to the list of substances which are to be phased-down. Its ratification, implementation, and enforcement pose challenges but also great opportunities.

If fully supported by governments, the private sector, and society, KA will reduce the projected production and consumption of powerful greenhouse gases HFCs by more than 80 percent over the next 30 years. KA is expected to avoid up to 0.5°C of global warming by the end of this century while continuing to protect the ozone layer.

# The Approach

UNIDO's Montreal Protocol Division (MPD) **promotes innovative technological solutions that transform industries** and enable countries to meet their international obligations under the Montreal Protocol

MPD services are fully integrated to support action across the Kigali Amendment, the Sustainable Development Goals and the transition towards a Circular Economy. These technical services focus on introducing innovative technologies, strengthening systems and building human capacities, so as to achieve inclusive and sustainable industrial development.



## Policies

- ▾ Institutional strengthening to develop/streamline policies and legal frameworks for implementation and compliance with KA
- ▾ Operationalization of regulatory and legislative frameworks
- ▾ Setting standards and certification schemes corresponding to newer technologies

## Technologies

- ▾ Identifying technological trajectories towards low-global warming potential and setting reasonable timelines for transition
- ▾ Lifecycle cost guidelines
- ▾ Combined approach that fosters climate-friendly refrigerant alternatives to HFCs and increases the energy efficiency of cooling and refrigeration systems
- ▾ Technical services throughout entire value chains

## People

- ▾ Targeted capacity-building and training for stakeholders in the handling of HFCs alternatives in the servicing, manufacturing and production sectors
- ▾ National awareness and consensus building process

# The Pillars

UNIDO's MPD specializes in the transfer to climate-friendly refrigerants (or alternatives) with low or zero global warming potential, as well as the safe management of flammable substances. We are experienced in promoting energy efficiency, and introducing low-carbon and low-emission technologies and practices. UNIDO is especially well-suited to the Amendment's following pillars:

## Pillar 1

### Flexible implementation

The Kigali Amendment allows Article 5 countries the flexibility to:

- ▶ Prioritize HFCs reductions by substance or by sector
- ▶ Design and implement own-strategies for HFC phase-down aligned to HCFCs phase-out
- ▶ Select suitable technologies and alternatives

UNIDO provides strategic guidance and technical assistance in order to maximize opportunities for successful implementation of Montreal Protocol

## Pillar 2

### Financial and technical cooperation

The Kigali Amendment opens new vital funding opportunities:

- ▶ Fast-start and enabling activities to facilitate ratification/implementation
- ▶ Financing the phase-down of HFCs in synergy with HPMP programs
- ▶ Cost guidance on EE of low/zero-GWP technologies

UNIDO has extensive experience arranging effective financial and technical cooperation, particularly in technology transfer

## Pillar 3

### Energy efficiency (EE) and safety standards

The Kigali Amendment opens up synergic opportunities for GHG emission reductions, technology innovation, and financial incentives:

- ▶ Supporting international standards for flammable and low-GWP refrigerants, low-carbon & low-emission technologies
- ▶ Safety standards and practices in Refrigeration & Air-Conditioning sector (RAC)
- ▶ Additional contributions in CO2 emission reduction through the EE improvements of new and existing RAC appliances/systems

UNIDO's expertise in energy efficiency leads to substantial investment potential for Montreal Protocol and climate action projects

# MPD in Action!

## Innovation – Connection - Transformation



### More than

25 years as a recognized implementing agency for Montreal Protocol (MP) - US\$900 million of technical assistance executed by MPD in 105 countries (26,7% of total MLF disbursement)



### Since 2010:

409 industry conversions completed (1 company/week)



More than 1000 projects



### Global

impact with emission reductions of 340 million tCO<sub>2</sub>eqv annually (≈ 71 million passenger vehicles driven for 1 year or 99 coal-fired power plants)



≈ 2000

SME's supported



Global portfolio 2019: 155 multi-year agreement (MYA) in 76 countries

## Inclusive and Sustainable Industrial Development (ISID) contributes to the achievement of the SDGs

### MPD's contribution to the SDGs



### Advancing Economic Competitiveness

- Green Economy Approach
- Leveraging public and private investment
- Promoting efficient production processes and contributing to the circular economy
- Innovation and redesign of products and equipment and technology transfer
- Contribution to economic diversification and increasing national GDP

### Creating Shared Prosperity

- Social Co-Benefits
- Positive consumer impacts (energy efficiency, etc.)
- Multi-stakeholder Partnerships
- Reduction of food waste (cold chain programme)
- Employment and competence building

### Safeguarding the Environment

- Phasing out Ozone Depleting Substances (ODS)
- Technologies reducing global warming
- Ecosystem safeguarding
- Other environmental benefits (waste management, reduced toxicity, noise reduction, etc.)

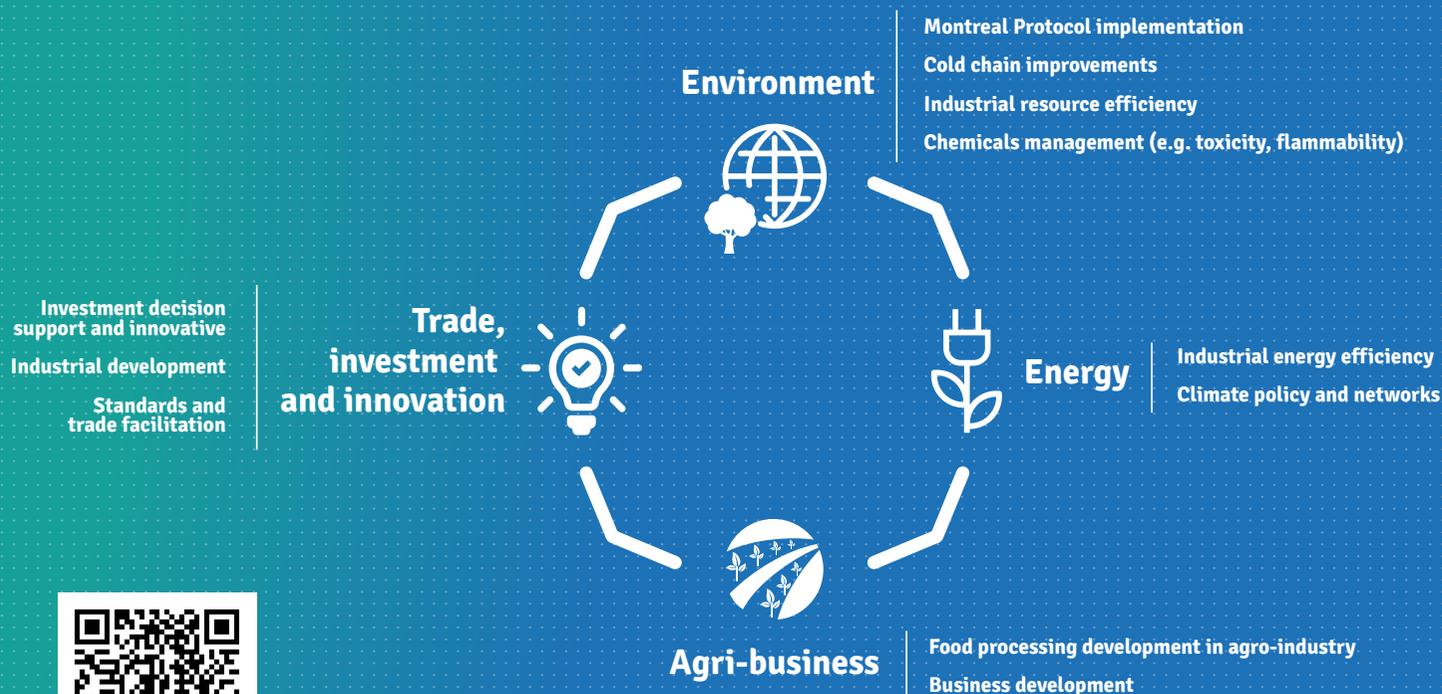
# Partnering with UNIDO

Demonstrated experience

In-house expertise, including energy efficiency

Strong partnerships and alliances

UNIDO has completed over a thousand projects to assist developing countries and economies in transition to comply with their obligations under the Montreal Protocol. We have decades of experience working in industrial development and technology transfer. UNIDO possesses diverse, comprehensive in-house expertise, essential to achieving the goals of the Kigali Amendment. We specialize in the following areas:



## Our partnerships and alliances

What is the PCP?  Programme for Country Partnership

The PCP is UNIDO's innovative model for accelerating inclusive and sustainable industrial development in Member States. Aligned with the national development agenda and focused on sectors with high growth potential, the programme supports a country in achieving its industrial development goals. The PCP rests on a multi-stakeholder partnership led by the host government. It builds synergies with ongoing government and partner interventions relevant to industrial development. The PCP is also designed to leverage additional investment in selected priority sectors. As such, it is a model that facilitates the mobilization of partners and resources to achieve larger development impact.

### Key features of the Programme

