ERASMUS-EDU-2023-CBHE
Project number: 101129032

Duration: 36 months
(01/01/2024 – 31/12/2026)

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LAND MANAGEMENT
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MICRO-CREDENTIAL

CLIMATE CHANGE FOR SUSTAINABLE LAND MANAGEMENT IN CENTRAL ASIA

7.- Cities, Air Quality and Human Health

Co-benefit Policies: Cleaner Air and Lower Emissions

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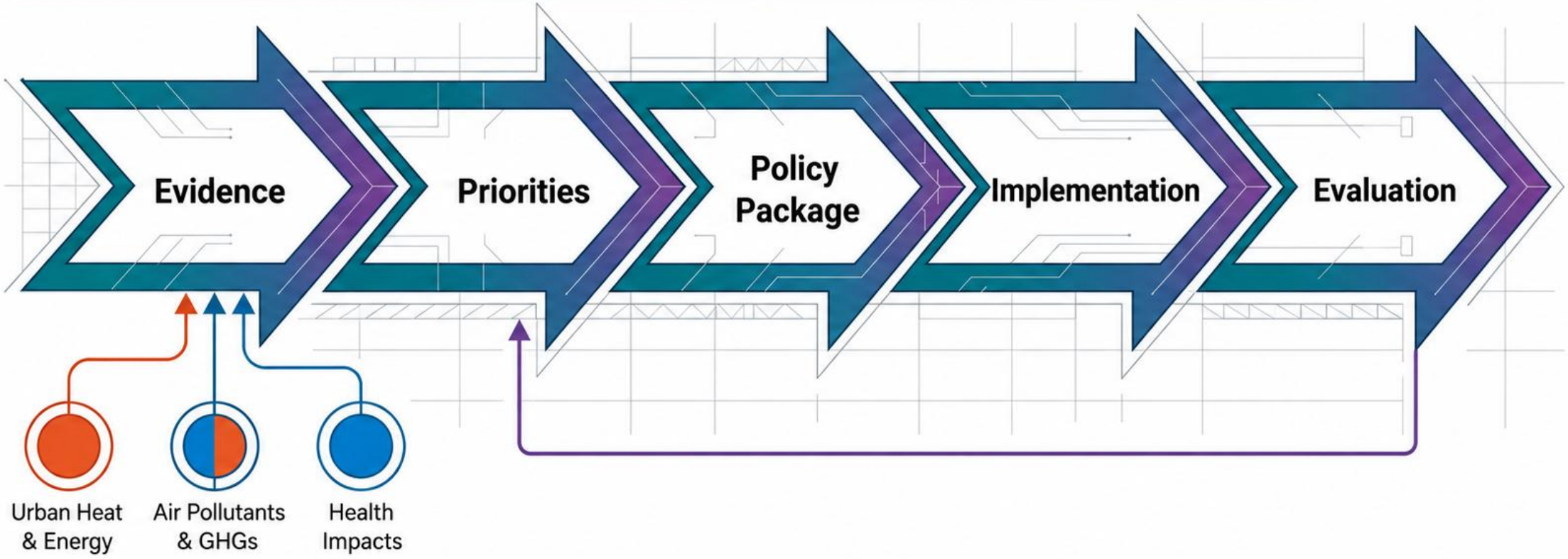
From Evidence to Policy Action

Previous evidence has established the risks. The next step is to translate that knowledge into coordinated policy priorities, instruments and action.

Key Takeaway: Co-benefits must be deliberately built into policy design.



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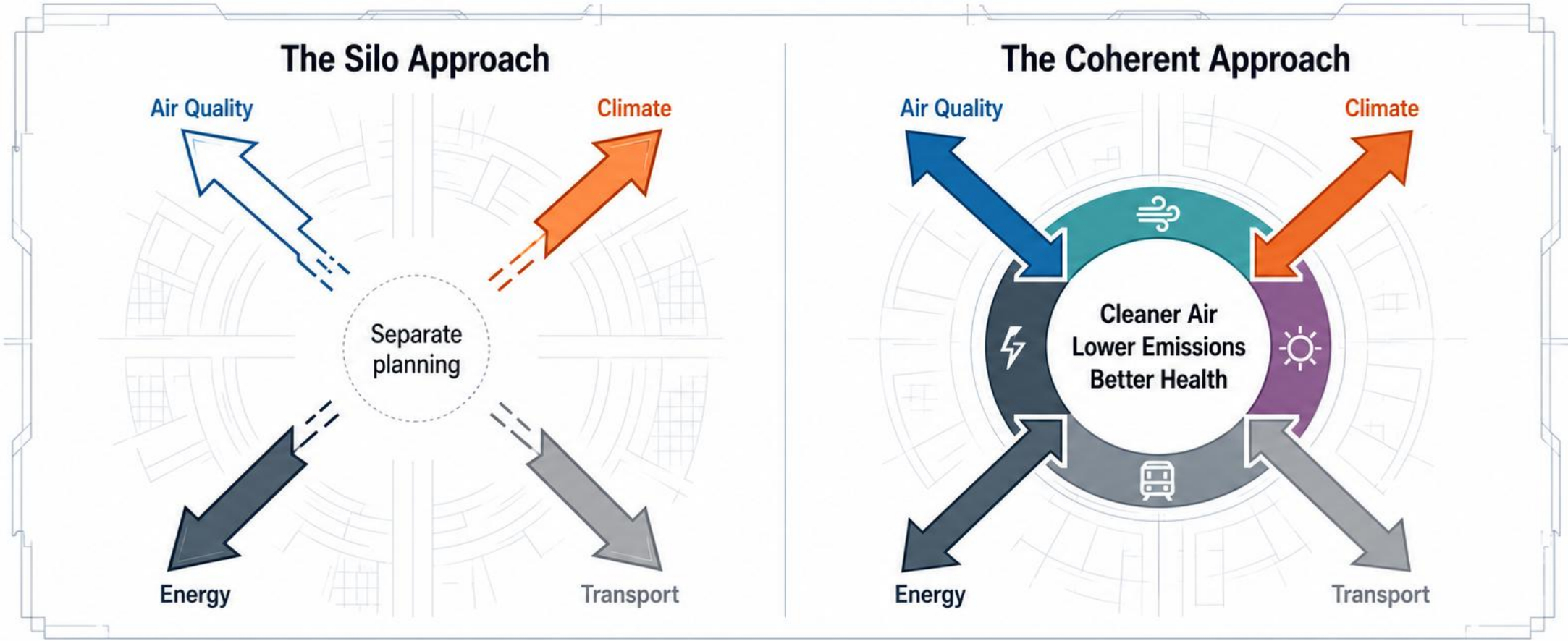
Why Separate Policies Miss Opportunities



- ***Fragmented planning*** can produce policies that work in isolation but fail when combined.
- **Different timelines** and performance indicators can make air quality and climate actions conflict.
- **Coordination** is needed to capture co-benefits and manage trade-offs.

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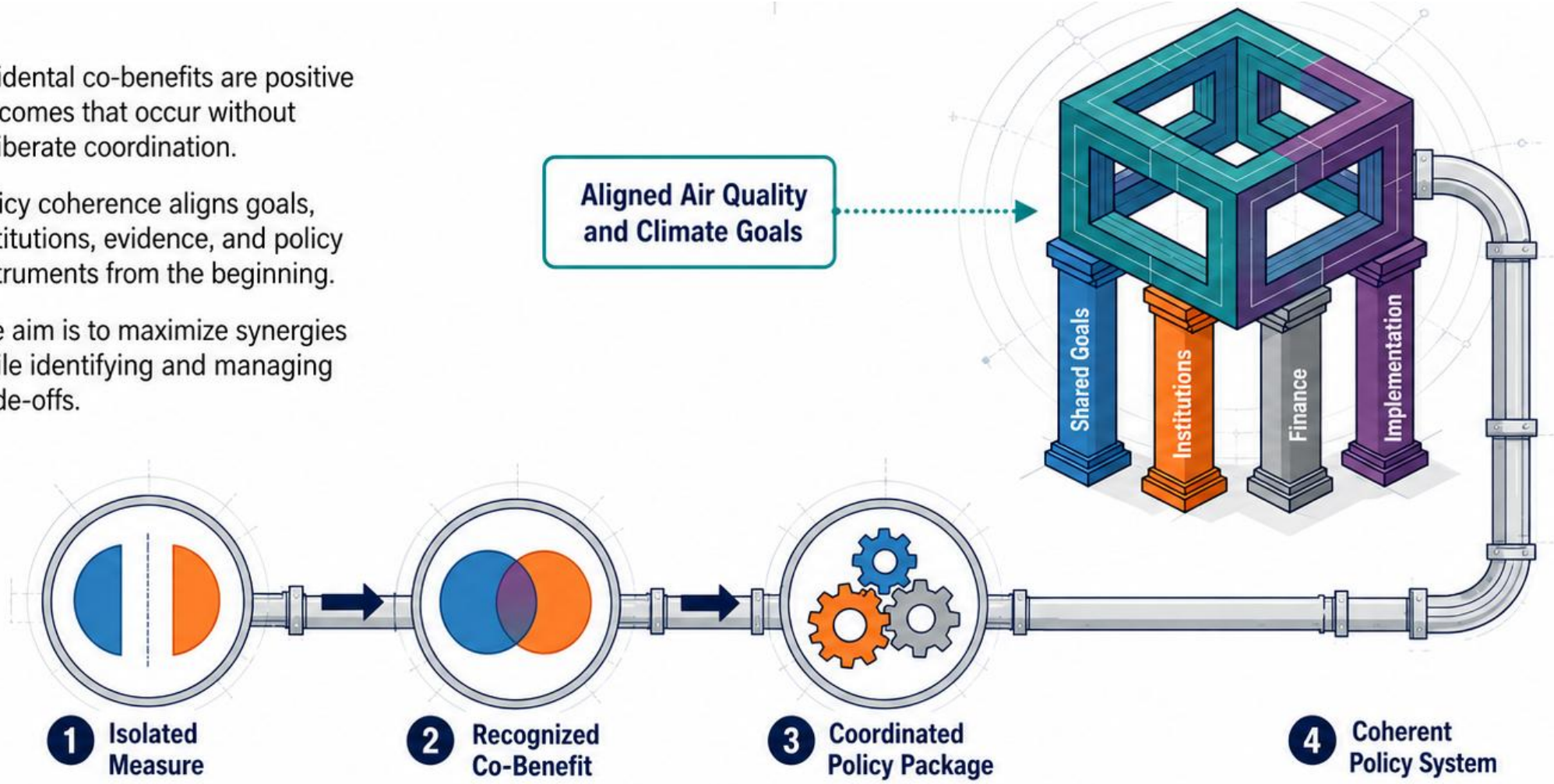
From Co-Benefits to Policy Coherence

- Incidental co-benefits are positive outcomes that occur without deliberate coordination.
- Policy coherence aligns goals, institutions, evidence, and policy instruments from the beginning.
- The aim is to maximize synergies while identifying and managing trade-offs.



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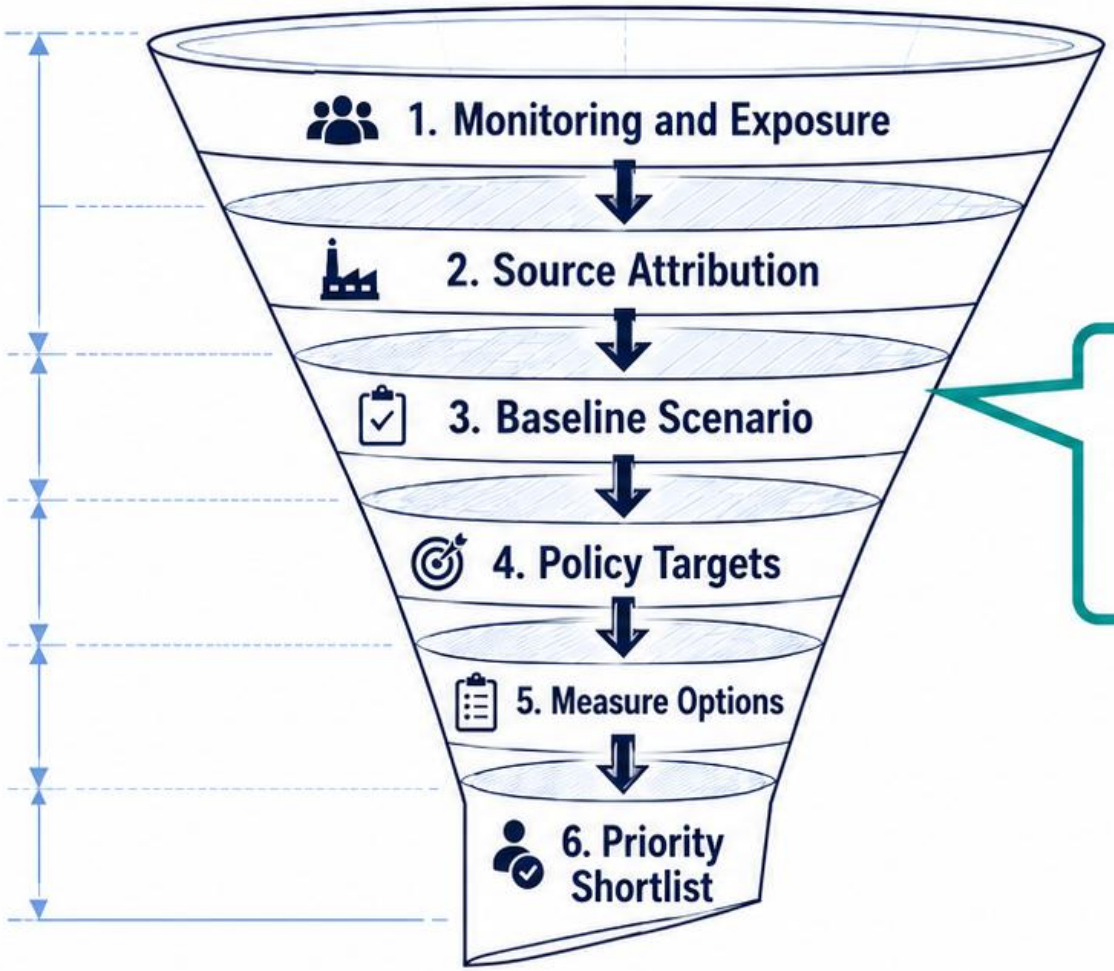
How Governments Identify Priority Measures

Prioritization begins by identifying where pollution occurs and who is exposed.

Source attribution connects population exposure to the activities and sectors responsible for it.

A baseline shows what may happen without additional policy action.



Critical Distinction:
Emissions are not the same as exposure.

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Comparing Air Quality and Climate Outcomes

- The largest emission reduction is not automatically the best overall policy choice.
- Measures should be compared across environmental, economic, and social criteria.
- Trade-offs should be made visible rather than hidden.

Multi-Criteria Policy Evaluation

	Air Quality	GHG Reduction	Cost-Effectiveness	Speed	Feasibility	Equity
End-of-Pipe Controls	●	◐	◐	●	◐	◐
Energy Efficiency	◐	●	●	◐	●	●
Fuel Subsidy Reform	◐	●	○	◐	◐	○

Illustrative comparison

● High ◐ Medium ○ Low

Priority setting requires a transparent multi-criteria comparison.

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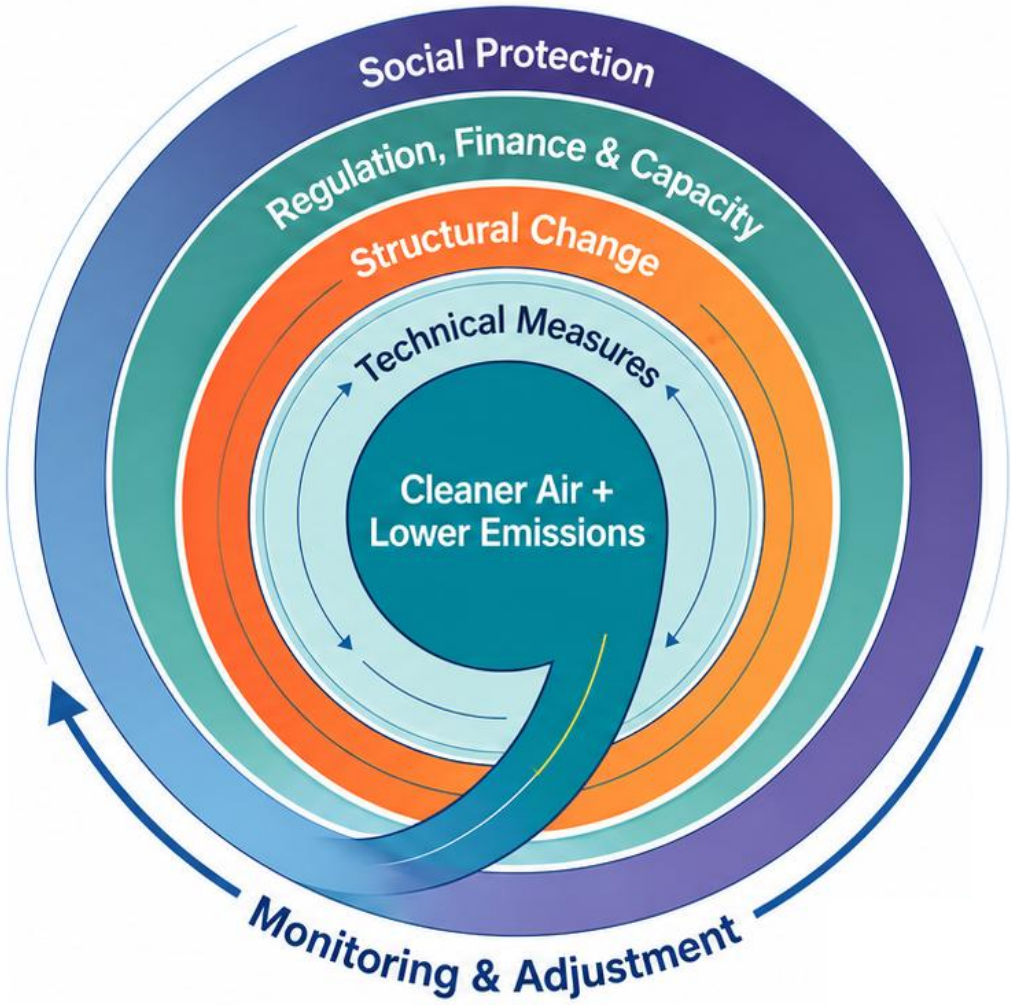
Why Policy Packages Work Better Than Single Measures

- No single measure can address all major urban emission sources.
- Technical measures work best when supported by regulation, finance, and institutional capacity.
- Social protection and monitoring make implementation more durable and equitable.

Effective packages combine technical measures with finance, regulation, and social protection.



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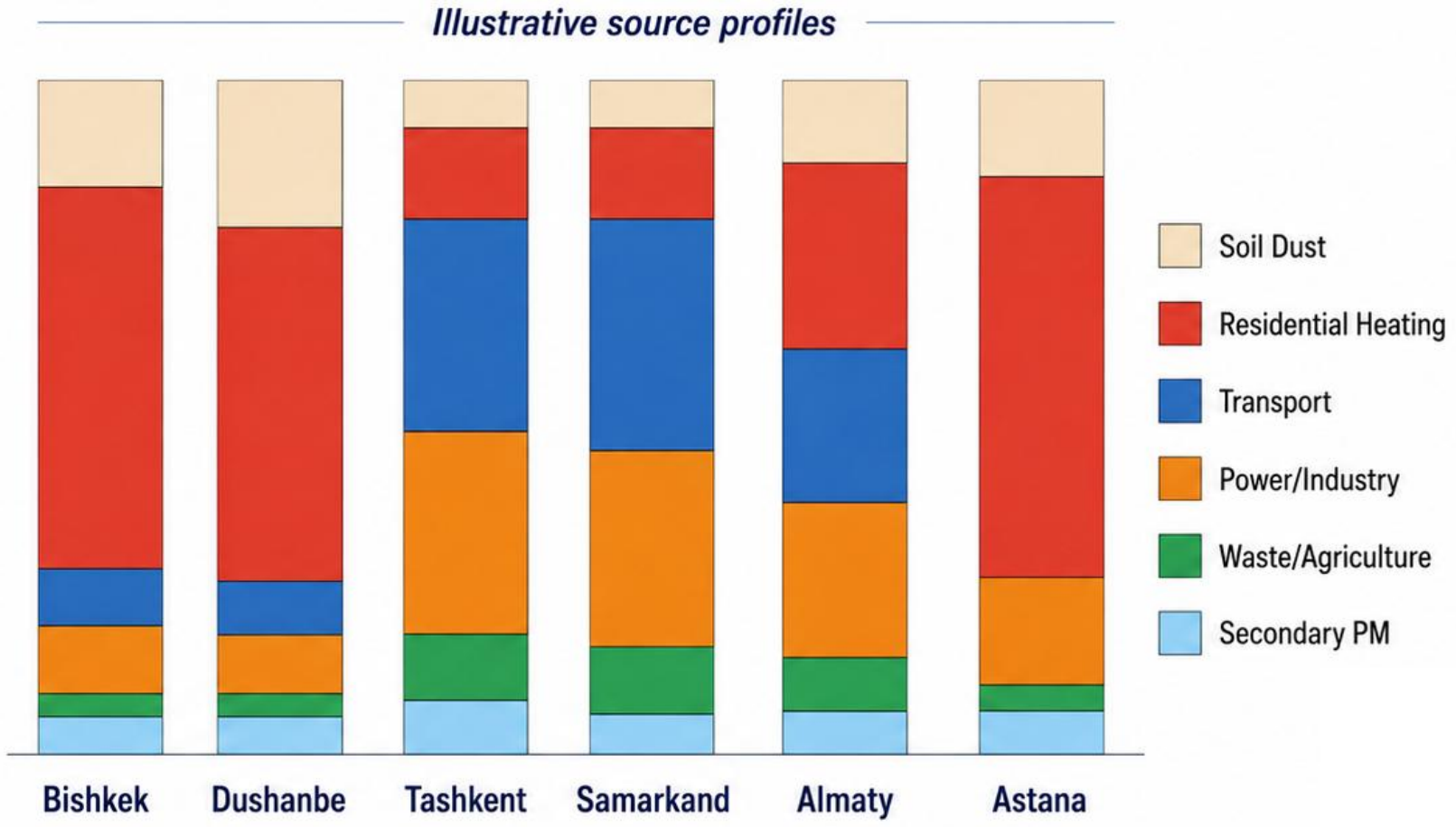
Central Asian Cities Need Different Policy Packages

- Central Asian cities share regional challenges but have different pollution-source profiles.
- Heating, transport, industry, and dust contribute differently across cities.
- Policy packages must therefore be adapted to local sources and exposure patterns.



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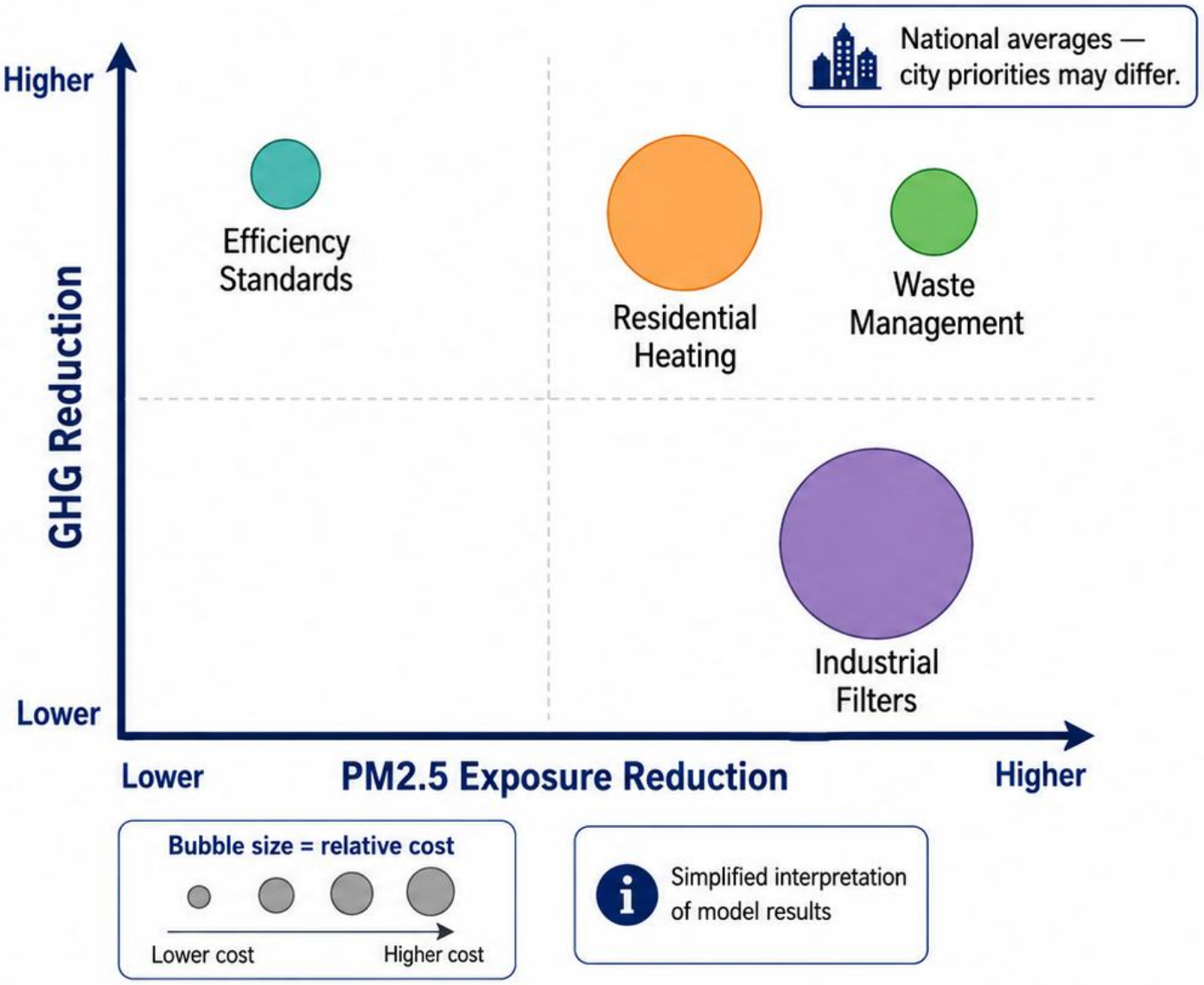
Kazakhstan: Which Measures Deliver Multiple Benefits?

- Measures differ in their effects on PM2.5 exposure, greenhouse-gas emissions, and cost.
- Some interventions support both air quality and climate goals, while others mainly serve one objective.
- National results provide direction, but city priorities still require local analysis.

Policy priorities should reflect exposure reduction, climate effects, and cost together.



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Tashkent: Turning Evidence into an Air Quality Roadmap

- A detailed source assessment provides the foundation for the roadmap.
- Technical measures must be supported by institutions, financing, and clear responsibilities.
- Monitoring and evaluation allow priorities to be adjusted over time.



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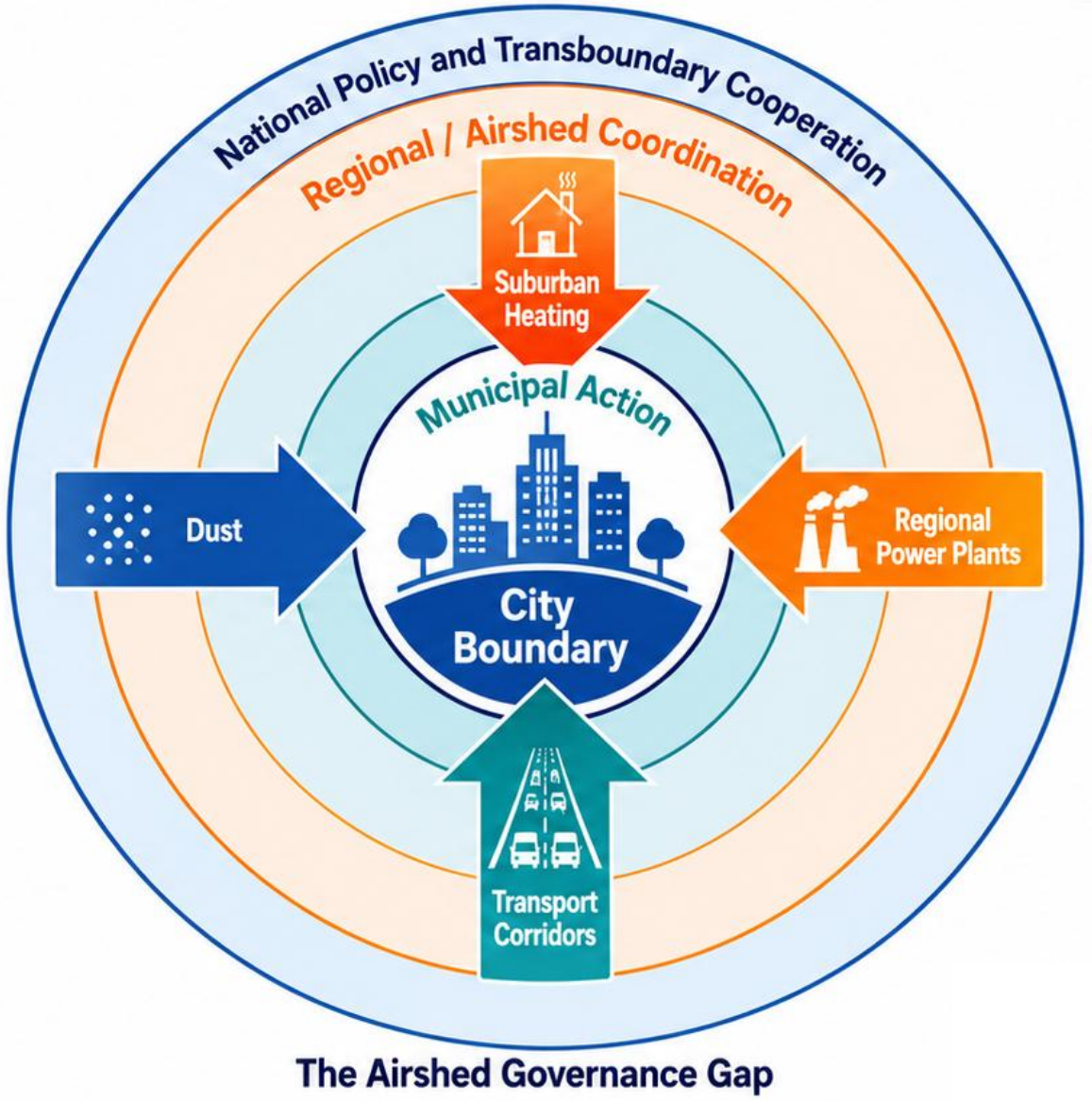
Why Cities Cannot Act Alone

- Urban air pollution crosses municipal boundaries.
- Many key policy levers are controlled beyond the city level.
- Effective airshed management requires coordination across municipal, regional, and national authorities.

Cities can reduce local emissions, but cleaner air requires coordination across the entire airshed.



The Airshed Governance Gap

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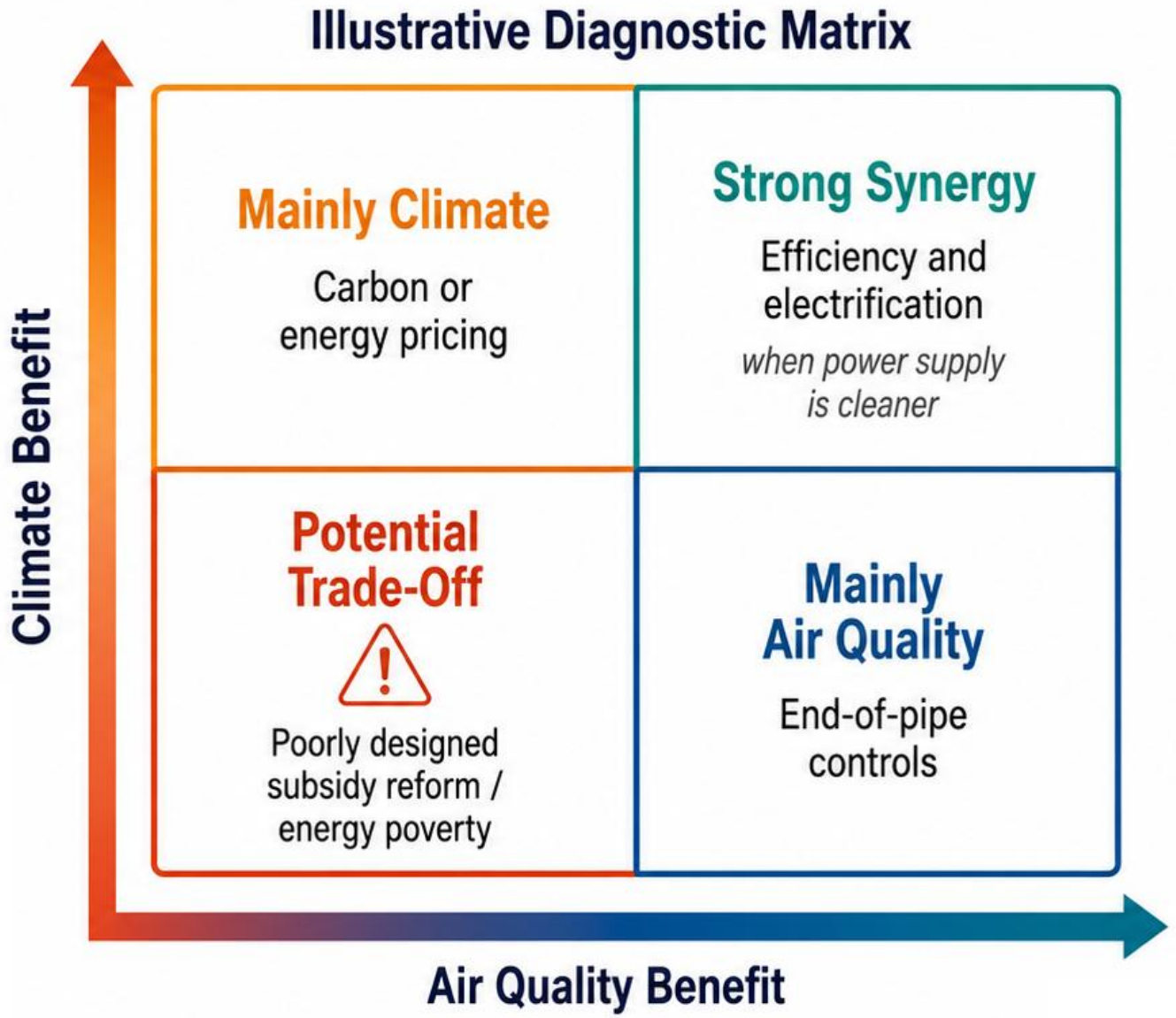
Trade-Offs and Unintended Consequences

- Not every air-quality measure produces a significant climate benefit.
- Poorly designed climate policies can increase household costs or shift pollution elsewhere.
- Trade-offs should be managed through sequencing, safeguards, and social protection.



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Making Co-Benefit Policies Implementable

- Assign clear responsibilities across institutions and levels of government.
- Link each measure to a timeline, budget, financing mechanism, and indicator.
- Use monitoring, public reporting, and social protection to sustain implementation.



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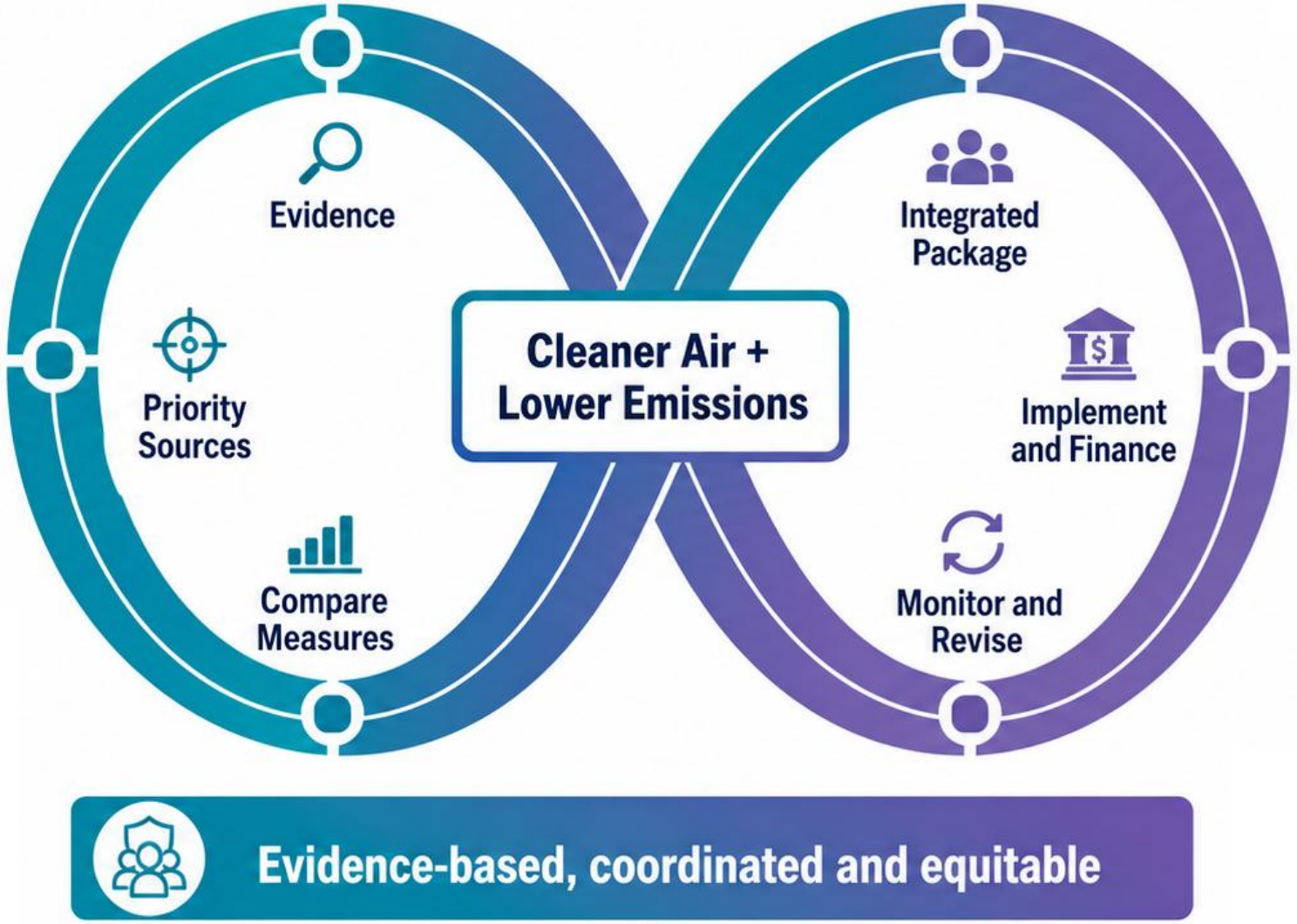
Cleaner Air Requires Coherent Policy

- Local evidence should determine policy priorities.
- Integrated packages should combine air-quality, climate, and equity objectives.
- Finance, accountability, and monitoring turn policy design into durable results.

Cleaner air and lower emissions reinforce each other when policy is evidence-based, coordinated, and implementable.



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