

GOOD GREEN JOBS AND LABOUR MIGRATION IN CITIES:

FROM SHORTAGES TO SOLUTIONS

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AGENDA

1

SETTING THE SCENE

Current trends and an overview of our existing work.

2

RESEARCH FINDINGS

Key data points and conclusions.

3

RECOMMENDATIONS

Asks to international actors.



SETTING THE SCENE



CLIMATE ACTION DRIVES JOB CREATION



Urgently needed climate action can create **30% more jobs** than business-as-usual economic approaches, especially in larger urban areas.

NEW TALENT IS NEEDED TO DELIVER CLIMATE ACTION AT SCALE AND PACE



Very few countries and cities have the domestic talent available to deliver on its emission-reduction targets. For instance, **a gap of 7 million workers** in renewable energy jobs could lead to a **temperature rise of 0.1°C**, costing also billions of dollars in lost productivity.

MIGRATION CAN BE LEVERAGED TO ADDRESS GAPS, BUT EVIDENCE IS LACKING

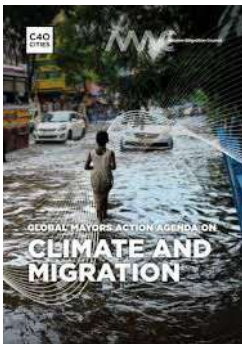


If properly harnessed and planned for, labour migration is increasingly seen as a potential source of talent, but leading mayors **need strong evidence and local data** to make the case publicly.

SETTING THE SCENE

SET THE AGENDA WITH MAYORS

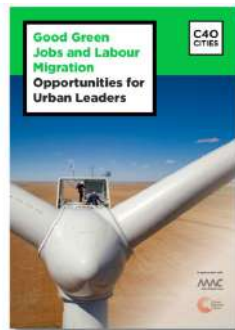
2021



C40-MMC Task Force mayors identify the link between **migration** and **green transition** as a key priority in their Action Agenda on Climate and Migration.

MAKE THE POLICY CASE FOR CITIES

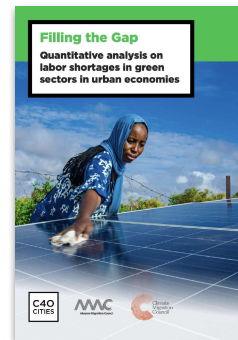
2023-24



First-of-its-kind policy analysis, mapping **over 30 examples of how cities are taking inclusive action** using both their formal and soft powers.

SOLID EVIDENCE AND ARGUMENTS

2025



New data on projected green labour shortages, highlights a need for ambitious workforce development and inclusive immigration solutions, starting from cities.

2022

2023

2025

Good Green Jobs Mission & Tracking

C40
CITIES

OUR RESEARCH OBJECTIVES



In developing innovative local data, our aim is to equip mayors to make the case for:

JOB CREATION

Climate action as a major driver of employment

INVESTMENT

Investment in training and reskilling to harness the opportunity

INCLUSION

Inclusive and pragmatic immigration policies

NARRATIVE SHIFT ON CLIMATE MIGRATION

RESEARCH OVERVIEW

SECTORS & OCCUPATIONS

3 SECTORS relevant for urban green transition, strongly influenced by local policies.

TRANSPORT

CONSTRUCTION

WASTE
MANAGEMENT

IN DEMAND OCCUPATIONS

p/sector

GEOGRAPHIC SCOPE

25 cities across 7 countries
(Brazil, Colombia, Kenya, Mexico, Italy, South Africa, USA)

TIMESCALE

2023 2040

FORMALITY

FORMAL

INFORMAL*

SCOPE

Jobs based in companies within the city, whether private or public.

RESEARCH OVERVIEW:

METHODOLOGY

BUSINESS AS USUAL SCENARIO

SHORTAGE

CARs + NDCs + GDP

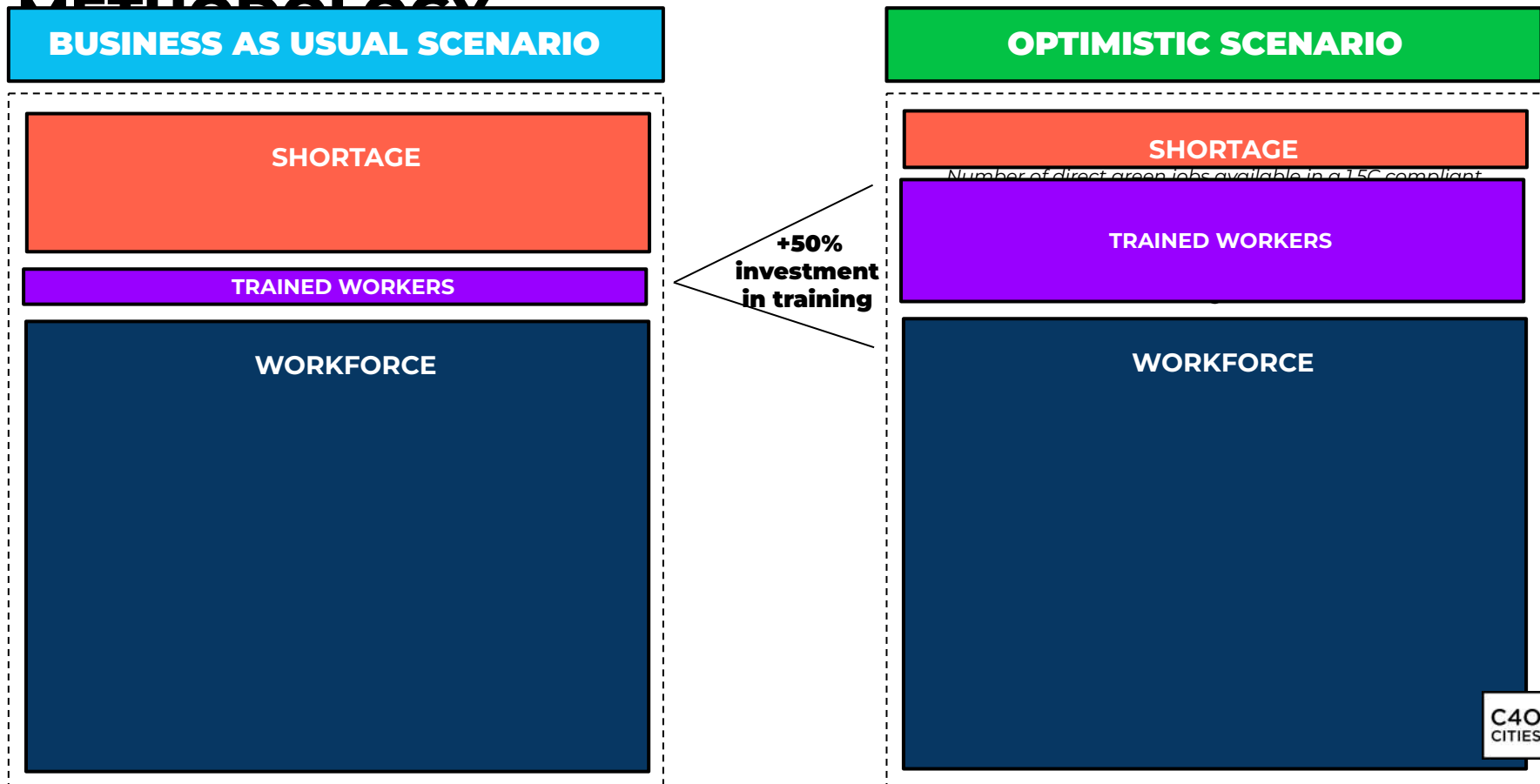
TRAINED WORKERS

WORKFORCE



RESEARCH OVERVIEW:

METHODOLOGY



RESEARCH FINDINGS



GLOBAL RESEARCH FINDINGS: BY 2040

DEMAND

→ **13 MILLION** green, direct jobs (43%)

SHORTAGES

→ Between **3 MILLION** and **6 MILLION**.

ECONOMIC IMPACT

→ **+\$124 BILLION - \$280 BILLION** USD potential economic growth if shortages are addressed.



RESEARCH FINDINGS: BY 2040



ROME

DEMAND

- **224K** green, direct jobs
- Representing **~24%** of all jobs in 3 sectors.

SHORTAGES

- **22K (Opt) to 80K (BAU)**
- Highest shortages: Solar energy, bus operation and manufacture, and waste collection.

**ECONOMIC
IMPACT**

- **+\$5B - \$19B** USD potential economic growth if shortages are addressed.

1. DEMAND FOR GREEN JOBS

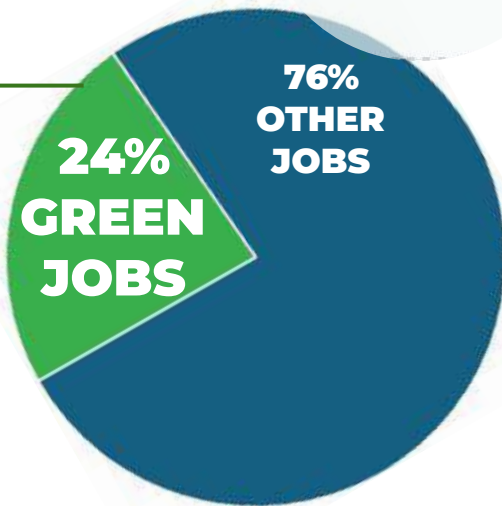
Urban climate action is projected to be a major driver of job creation and employment in Rome.

By 2040, 224,000 green jobs will be needed - in the Construction, Transport, and Waste sectors alone - as a result of Rome's policies and investments. Notably, green jobs are estimated to be one-quarter (24%) of all jobs in those three sectors in Rome.

224K

Demand for direct,
green jobs

2040

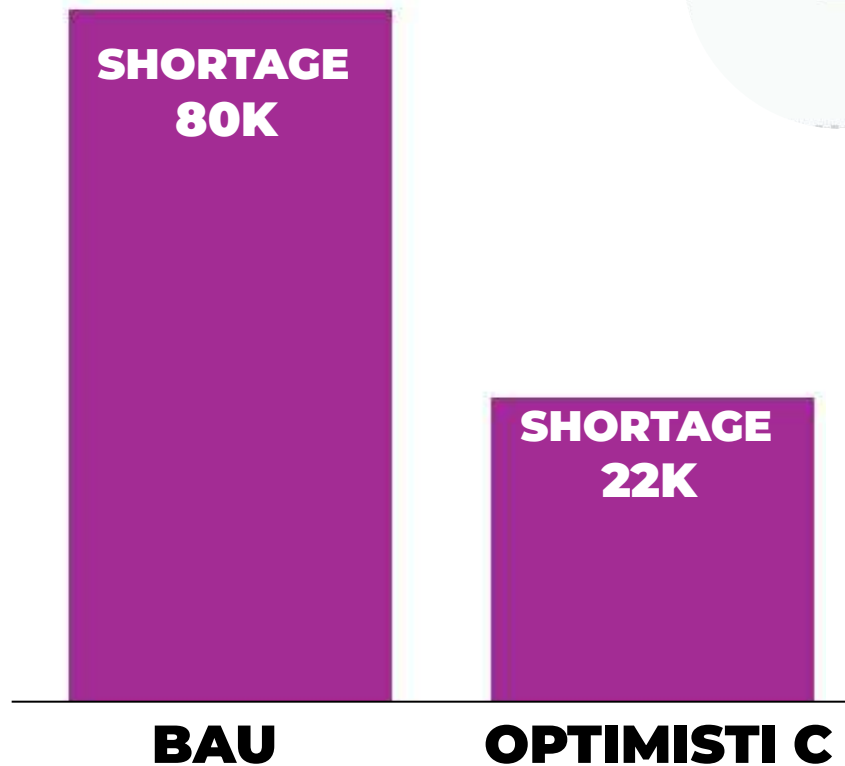


Demand for green workers as a share of total demand for workers, across the three sectors in Rome in 2040.

2. SIGNIFICANT LABOR SHORTAGES ARE PROJECTED ACROSS GREEN SECTORS IN URBAN ECONOMIES.

This growing demand will create unprecedented job opportunities - with between 22K to 80K shortages projected by 2040 to implement planned climate interventions in the Construction, Transport, and Waste sectors alone.

Without concerted investment and policy intervention, these labor shortages could present a missed opportunity both for workers and local economies, and could slow or stall the green transition.



Job shortages for green, across the three sectors in Rome in 2040.

2. SIGNIFICANT LABOR SHORTAGES ARE PROJECTED ACROSS GREEN SECTORS IN URBAN ECONOMIES.



CONSTRUCTION

Demand: 135K workers

Shortages: 11K-48K

SOLAR FARMS **2K**

INSTALLATION OF SOLAR PANELS **1.6K**

GREY WATER INFRASTRUCTURE **1.5K**



TRANSPORT

Demand: 57K workers

Shortages: 6K-20K

BUS OPERATION **2K**

MANUFACTURE/ MAINTENANCE **1K**

BUS MANUFACTURE/ MAINTENANCE BIKE **1K**



WASTE

Demand: 32K workers

Shortages: 5K-11K

KERBSIDE COLLECT **2K**

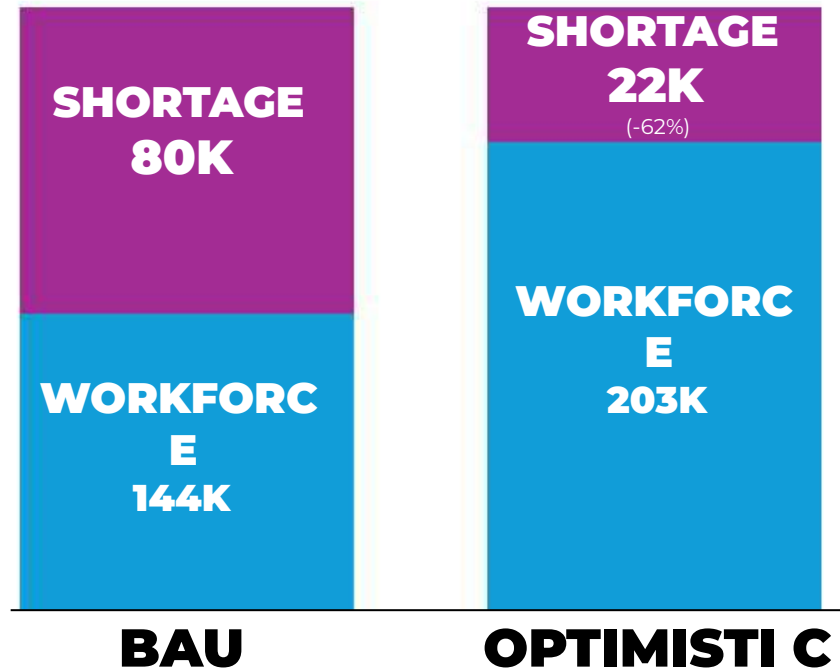
WASTE SITE OPERATION **1K**

WASTE TRANSPORTATION **1K**

3. SHORTAGES CAN BE ADDRESSED THROUGH A TWO-PART SOLUTION: TRAINING EXISTING WORKERS WITH NEW SKILLS AND SUPPORTING MIGRANT WORKERS TO ACCESS THESE OPPORTUNITIES.

Inclusive training and skills building programs for local communities will be essential for cities to meet the demand for green workers. A 50% increase in public investment in technical and vocational training could bring down shortages from 80K to 20K. Yet, this would still leave significant demand and opportunities for employment unable to be met.

Yet skills development programs cannot address all labor shortages. Attracting new talent through domestic and international migration which meets the higher demand for labour could further help cities address gaps that cannot be filled through local workforce.



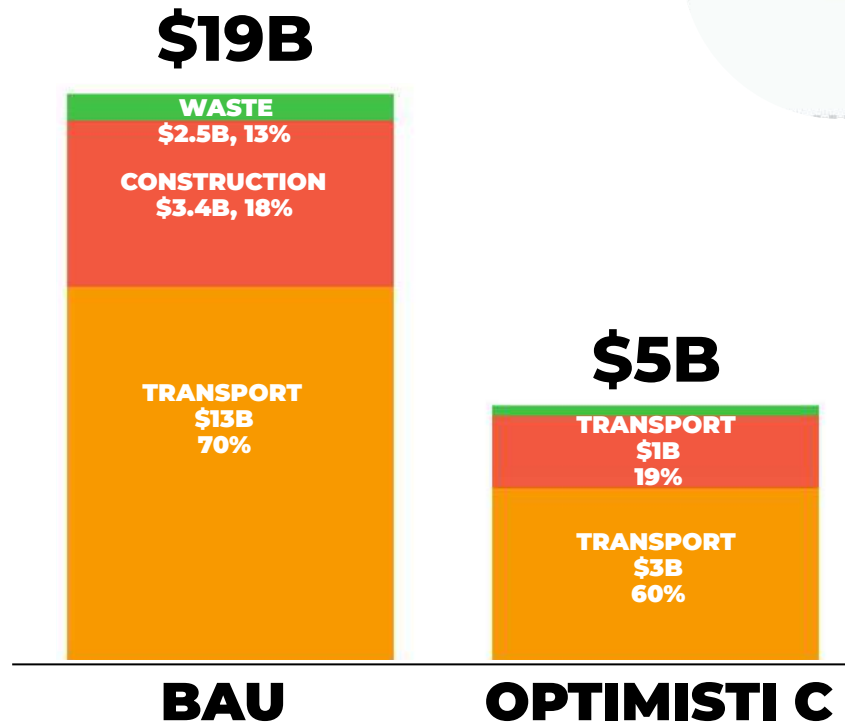
Workforce and shortages, across all three sectors in Rome in 2040.

4

Ensuring projected shortages are addressed would present a major economic opportunity for cities.

- By ensuring projected shortages are addressed, through combined skills training and inclusive immigration policies, Rome could see up to \$19B USD in economic growth by 2040.

Addressing projected green shortages can not only ensure that the green and just transition succeeds, but drive inclusive, economic development. Failing to address these labor shortages would mean leaving that opportunity on the table.



Economic impact of green shortages, in the BAU scenario in 2040, per sector in Rome.

AREAS OF OPPORTUNITY

**National and international action to
better support cities**



C40
CITIES

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MMC
Mayors Migration Council

Climate
Migration
Council

1.

Invest in city-led climate action that creates good, green jobs in cities of origin, transit, and destination.

2

Ramp up urban workforce development programmes in cities, ensuring that a growing demand for green labour is met with a qualified, inclusive, and diverse workforce.

3

Improve training, employment access, and skills development for newcomers, prioritising green urban sectors where shortages of labour and skills are most acutely felt.

4.

Establish labour pathways focused on green skills and urban sectors with high demand for labour, unlocking benefits for both countries of origin and of destination, including for climate migrants.

5

Work with cities to promote decent working conditions, social protection, and dialogue, starting by driving recognition of informal workers – including migrant workers.

1. Invest in city-led climate action that creates good, green jobs in cities of origin, transit, and destination.

RECOMMENDATIONS:

- Ensuring that climate finance supports good, green job creation in cities and is directly accessible to local governments.
- Investing in instruments that go directly to cities, such as the Mayors Migration Council's Global Cities Fund for Migrants and Refugees and C40's Inclusive Climate Action Fund.
- Accelerating the localisation of development and humanitarian funding, with a focus on good, green job creation.

CITIES LEADING IN ACTION:

→**FREETOWN:** The city's Waste Management Micro-Enterprise Programme has established 40 micro-enterprises that employ 240 young people, has increased waste collection to 34%, closed illegal dumpsites, established a waste collectors union and registered over 2,600 households for collection services.

→**AMMAN:** Amman's cash-for-work programme has supported the rehabilitation of green infrastructure, contributing to improved biodiversity conservation and climate adaptation while creating recreational space that enhances social cohesion, and employing over 5,000 workers including vulnerable Jordanians and Syrian refugees.



2. Ramp up urban workforce development programmes in cities, ensuring that a growing demand for green labour is met with a qualified, inclusive, and diverse workforce.

RECOMMENDATIONS:

- Drastically increase investment in education and training.
- Develop national workforce development plans and directly support local governments in their implementation.
- Work with cities to acquire a coherent and data-informed understanding of skill composition and skill needs.

CITIES LEADING IN ACTION:

→ **LONDON:** The removal of the three-year residency requirement for the city's adult learning programmes has boosted eligibility by over 400,000, widening access to skills training for under-represented groups - including migrants and refugees - and driving forward city efforts to meet labour demands and support Londoners into good jobs.

→ **SÃO PAULO:** São Paulo's Programa Operação Trabalho helps unemployed residents, including rural-to-urban migrants, re enter the labor market through training, with a specific focus on sustainable urban agriculture projects that generate income and employment while greening the city.

3. Improve training, employment access, and skills development for newcomers, prioritising green urban sectors where shortages of labour and skills are most acutely felt.

RECOMMENDATIONS:

- Reduce the legal barriers for newcomers to obtain work permits to make the process of entering the green workforce faster.
- Improve international recognition of educational qualifications - including through bilateral migration agreements on skilled migrants
- Strengthen local governments' technical and financial capacity to deliver those services that are critically relied upon for the economic inclusion of newcomers.

CITIES LEADING IN ACTION:

→**NAIROBI:** Nairobi's CHOICE Innovation Hub has trained over 100 youth in green job readiness and incubated 10 sustainability-oriented startups, 80% of which are led by migrants and refugees, successfully creating pathways to green employment for marginalised communities.

→**PHILADELPHIA:** Funded by a local beverage tax, Philadelphia's REBUILD program partners with trade unions to provide apprenticeships in high-demand construction sectors for disadvantaged groups, creating permanent jobs and improving community infrastructure within the city.

→**NYC:** The city is addressing systemic barriers to migrant employment by proactively engaging with nearly 40,000 asylum seekers through in-person surveys to determine work authorization eligibility, and by providing direct assistance to over 3,000 applicants at its Asylum Application Help Center to streamline the federal application process.

4

Establish labour pathways focused on green skills and urban sectors with high demand for labour, unlocking benefits for both countries of origin and of destination, including for climate migrants.

RECOMMENDATIONS:

- Develop green skill mobility partnerships and talent pools that are connected to local shortage occupation lists and developed in partnership with cities and businesses.
- Develop safe pathways for climate- vulnerable communities.
- Partner with cities and businesses to pilot circular mobility programmes.

CITIES LEADING IN ACTION:

→**MILAN:** Through the 'MENTOR Mediterranean Network for Training Orientation to Regular Migration' program, Milan engages in international city-city partnership on skills and circular mobility with Turin and partners in Morocco and Tunisia, creating circular migration pathways by training workers in their home countries to fill labor shortages in urban sectors, particularly aligned with the green transition.

→**ANDALUCIA:** Andalucia's MOVE_GREEN 36 month project provided tailored professional training to Moroccan graduates, followed by training programmes in Spain to equip them skills necessary to work in renewable energy and green economy sector, supporting cross border cooperation between businesses in the two counties.

5. Work with cities to promote decent working conditions, social protection, and dialogue, starting by driving recognition of informal workers – including migrant workers.

RECOMMENDATIONS:

- Recognise the informal sector is an essential contributor to local and national green transition processes.
- Establish social dialogue and inclusive participatory processes that engage businesses, union, and informal workers.
- Strengthen the protection, ethical recruitment, and safeguarding of all workers, including migrant workers.

CITIES LEADING IN ACTION:

→**ACCRA:** Through the CLEAN: Creating Livelihood and Environmentalism in Accra Now, Accra has integrated over 450 migrant waste workers into the formal economy and improved their access to healthcare and childcare programmes, and financial inclusion services.

→**BENGALURU:** Bengaluru has improved working conditions for its waste workers, including IDPs, migrants and refugees, through a participatory assessment of over 900 workers to identify specific needs and barriers to formal recognition and access to services, which led to recommendations like improving visibility and inclusivity for vulnerable workers and legal recognition for migrants.

Thank you!

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research:**

