

Strategic Dialogue on Advancing Future Cooperation on Environmental Challenges in Southeast Asia

27-28 May 2026, Kawasaki, Japan

GIZ - Working together worldwide

Alvaro Zurita, GIZ

giz Deutsche Gesellschaft
für Internationale
Zusammenarbeit (GIZ) GmbH

The Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) GmbH...

- is a global service provider in the field of international cooperation for sustainable development
- supports the German Government and many public and private sector clients in achieving their objectives in the field of international cooperation for sustainable development.
- fosters international education work and strategic human capacity development.
- as a public-benefit federal enterprise, GIZ represents German and European values
- is a company under private law and has a taxable business area, GIZ International Services, alongside our public-benefit business area.

Over 50 years of experience in a very wide spectrum of thematic areas



Peace and security

Climate and environmental protection



Agriculture and food

Sustainable infrastructure



Migration

Economic development and employment



Democracy and the rule of law

Digital transformation



In our work, we draw on a wide range of experience-based approaches and methods



Advisory services and project implementation



Networking, dialogue and mediation

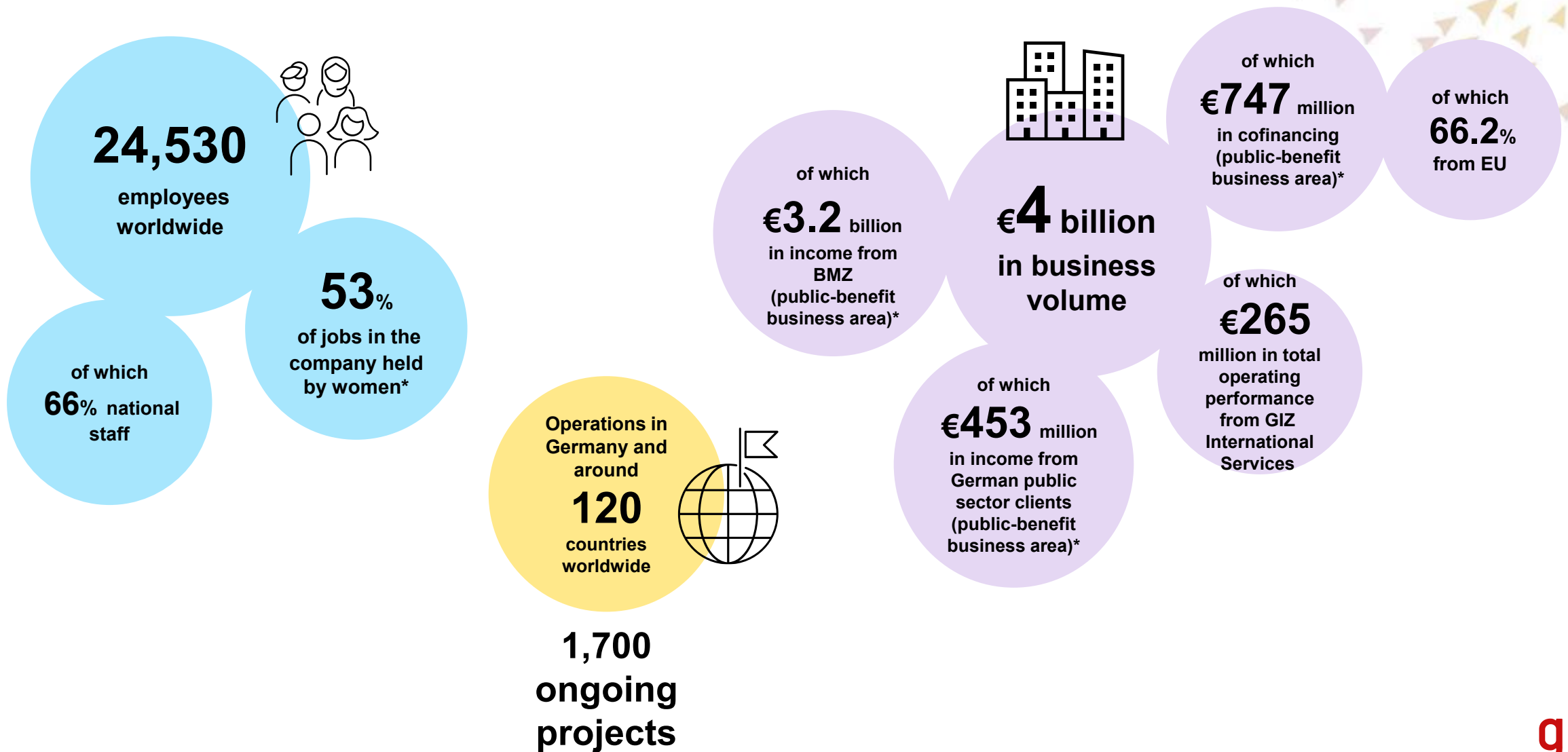


International capacity development



Management and logistics

Selected business figures (2024)



A selection from over 200 partners and clients



German Federal Government and ministries

Economic Cooperation and Development (BMZ)
Federal Foreign Office (AA)
Economic Affairs and Climate Action (BMWK)
Environment, Nature Conserv., Nuclear Safety, Climate Change (BMUKN)
Defence (BMVg)



Private businesses

BASF, Bayer AG
DHL; Olam International Ltd.
SAP; Siemens,
Strauss GmbH & Co
BMW, VW



Foundations and funds

Bill & Melinda Gates Foundation
The Global Fund to Fight AIDS, Tuberculosis and Malaria
Green Climate Fund
Robert Bosch Stiftung
Association of German Foundations; German political foundations



German and internat. Institutions / organisations

International: DANIDA (Denmark); SDC (Switzerland);
DFAT (Australia); DGIS (Netherlands); FCDO (UK); GAC (Canada);
KOICA (Korea); NORAD (Norway); SECO (Switzerland); SIDA (Sweden)
German: BGR; DEG; EG; IDOS
Goethe-Institut; KfW; PTB; sequa; THW



EU and Directorates-General

European Neighbourhood and Enlargement Negotiations (NEAR)
International Partnerships (INTPA)
European Civil Protection and Humanitarian Aid Operations (ECHO)
Service for Foreign Policy Instruments (FPI)
European Investment Bank (EIB)



Supporting air quality management in developing countries

GIZ's approach and commitment

Air pollution is in the public eye...

60p

1

War reporting under attack
By Patrick Cockburn

Britain's bad air as big a threat as obesity

Secrets of Strictly
Who's it really? What's behind the scenes?

Katy Balls
The Tories are getting election jitters

Budget 2018 analysis
End of austerity? No. Public finances will be repaired for no reason, warn economists

'In 10 yrs, Delhi air will be world's deadliest'

Kaareya Sinha
@sinhasgaur.com

London: In another 10 years, Delhi will record the world's largest number of premature deaths annually due to air pollution among all megacities in the world. By 2025, nearly 32,000 people in Delhi will die solely due to inhaling polluted air. However, it will be Kolkata that will record the highest number of such deaths annually by 2050. Kolkata will see the number of premature deaths spike between 2025 and 2050 and will record 34,800 deaths due to air pollution — more than Delhi (32,000) and Mumbai (33,500).



Together, these three cities topped the list of premature deaths due to harmful particles like PM2.5 and PM10 in the air. Annually, 3.2 million people worldwide die prematurely from the effects of air pollution. This number will double by 2050 to 6.6 million if emissions continue to rise, according to a team of scientists at the Max Planck Institute for Chemistry in Mainz. In 2018, 73% of such mortality occurred in Asia — 1.4 million in China and 600,000 in India.

The Telegraph

Home News World Sport Finance Comment Culture Travel Life Women Fashion

USA Asia China Europe Middle East Australasia Africa Nelson Mandela So

WORLD NEWS - WORLD NEWS - ASIA - CHINA

These city of Harbin shrouded in smog as air pollution

The city paralysed by smog as Beijing announces new measures to tackle air in the capital



Image 1 of 2
People ride along a street on a smoggy day in Daqing, Heilongjiang



Britain's bad air as big a threat as obesity

It is becoming clearer that air pollution is not just a major cause of heart disease and strokes. A March of experts' research suggests that it could be as deadly as obesity. The research, published in the journal *Environmental Health Perspectives*, found that air pollution is a world health organization's most serious air quality issue. This is because, putting combined of factors of air pollution...

BBC NEWS

Home World Business Arts & Culture Health & Science

Air pollution may reduce life expectancy of Indians by nine years, says study



SEX Can it solve the national pleasure crisis?

Guardian

High pollution levels 'causing huge reduction in intelligence'

Researcher says air pollution causes a 'huge' reduction in intelligence, according to a new study. The study, published in the journal *Environmental Health Perspectives*, found that the damage to the brain is caused by the release of tiny particles into the air. The study was conducted in China, a country with some of the world's worst air quality. The researchers found that people living in high pollution areas had lower IQ scores than those in low pollution areas. The study also found that the damage to the brain is reversible if people move to a low pollution area. The researchers say that the study is the first to show that air pollution can cause a 'huge' reduction in intelligence. The study was conducted in China, a country with some of the world's worst air quality. The researchers found that people living in high pollution areas had lower IQ scores than those in low pollution areas. The study also found that the damage to the brain is reversible if people move to a low pollution area. The researchers say that the study is the first to show that air pollution can cause a 'huge' reduction in intelligence.

Bad air may cause monsoon to weaken, finds new study

Darjeeling, India (TNN) / Updated: Aug 25, 2021, 08:53 IST

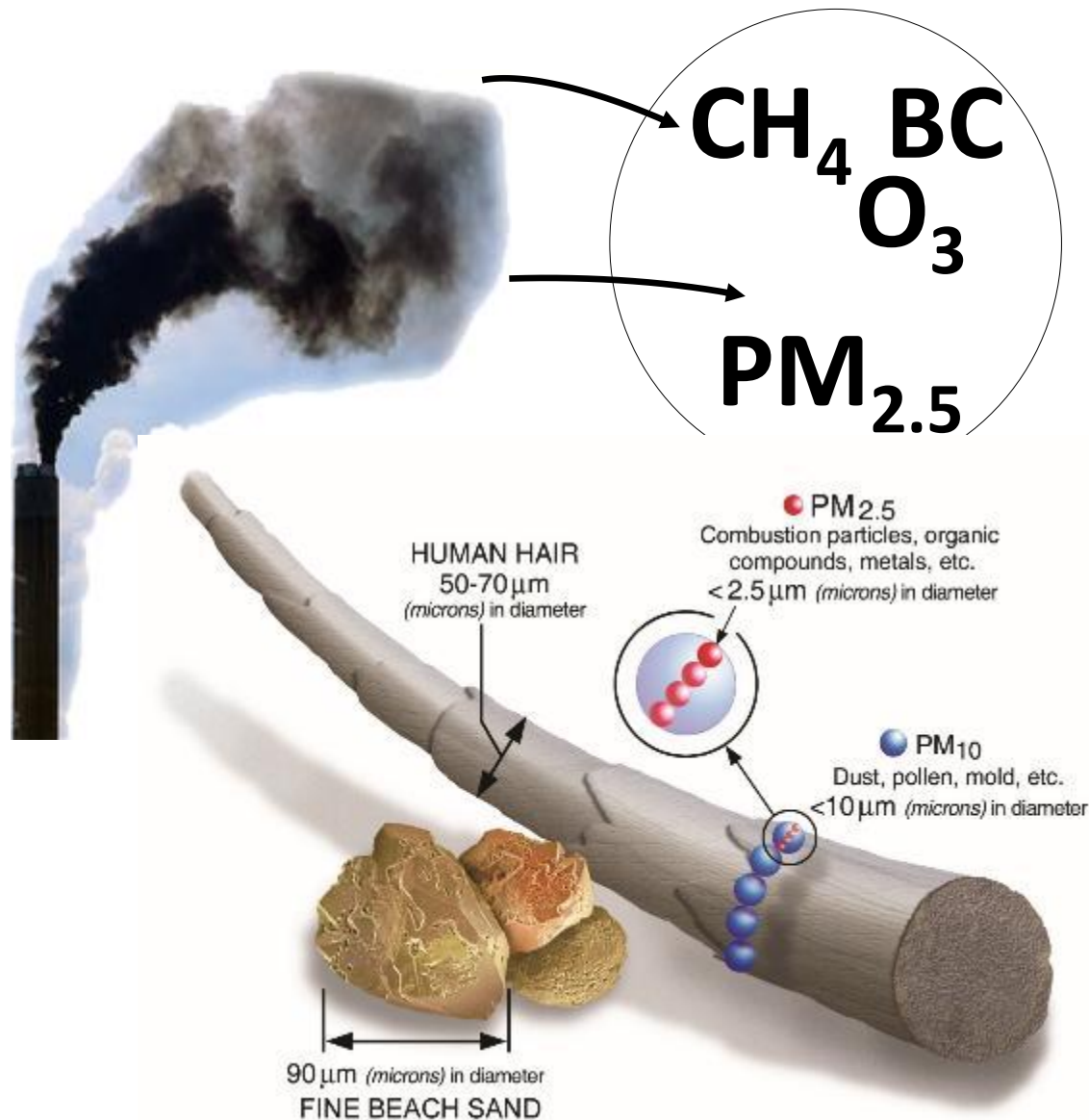
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ARTICLES

- Bad air may cause monsoon to weaken, finds new study
- Delhi's Little Khatu: A cautionary reminder of home for Afghans in India
- The Time Rajat almost lost INR 60,000: here's how to be sure...
- Taking legal action does not amount to abetting suicide...

Children play in a waterlogged street during rain in New Delhi (PTI Photo)

Main air pollutants



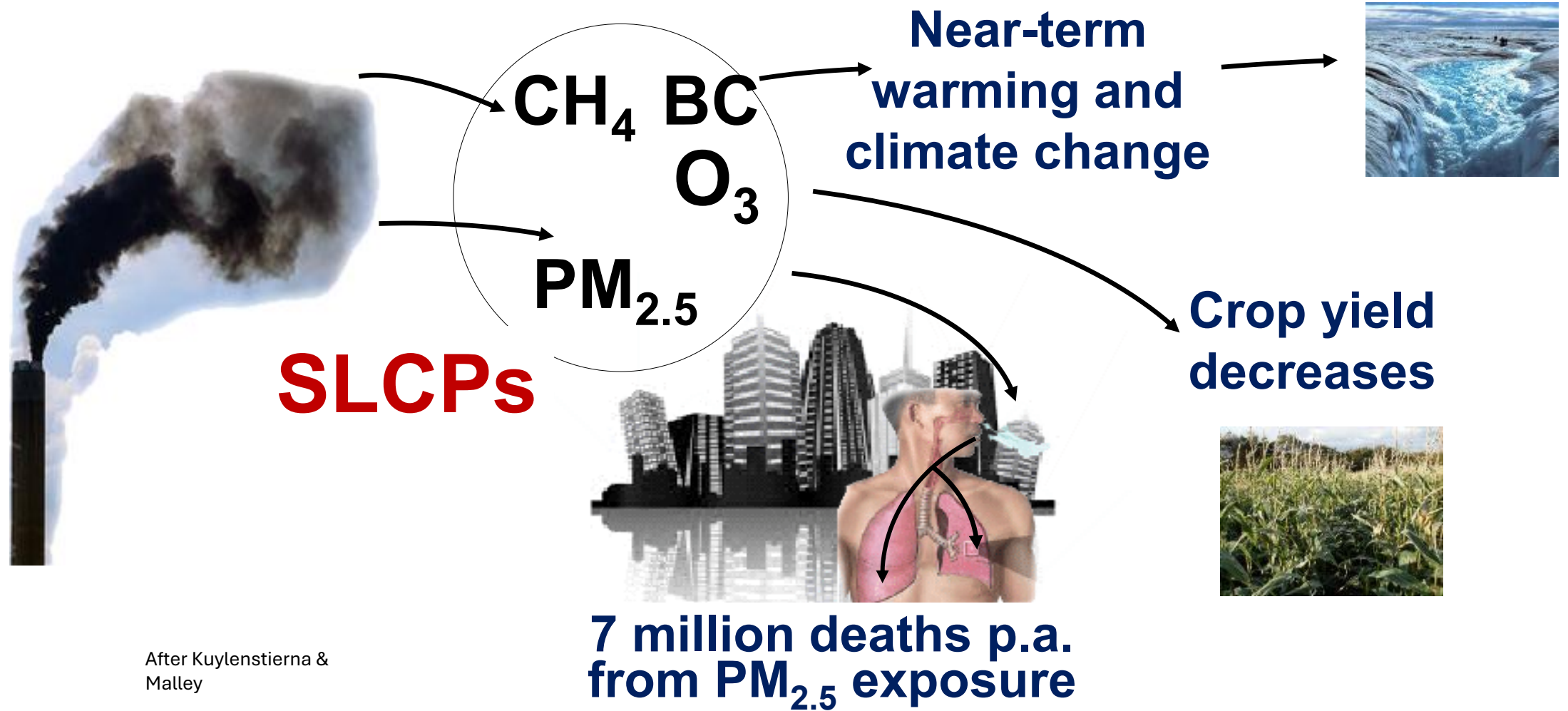
Gaseous:

- Methane (CH_4)
- Nitrogen Oxides (NO_x)
- Ozone (O_3)
- Carbon Monoxide (CO)

Particulate:

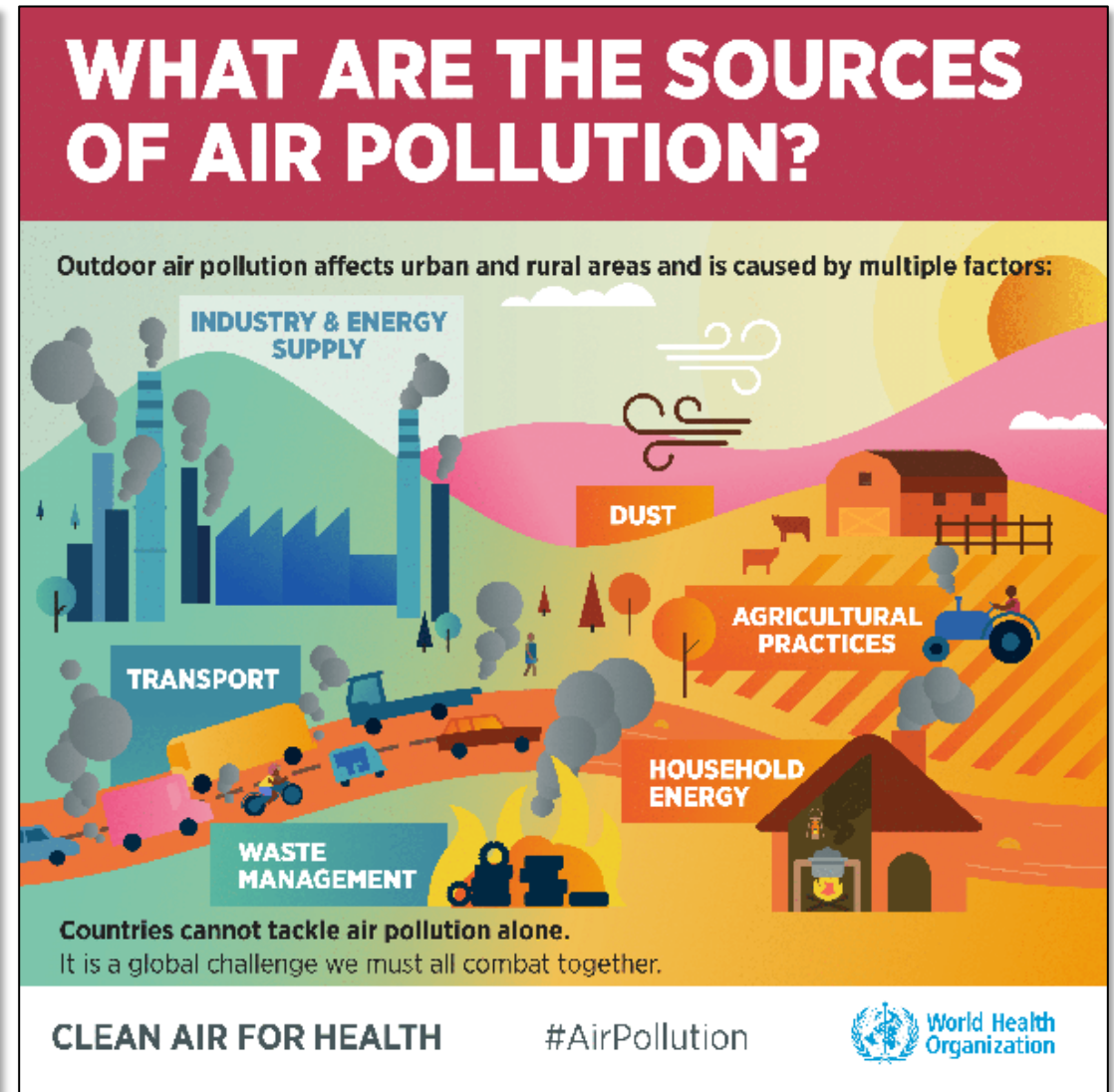
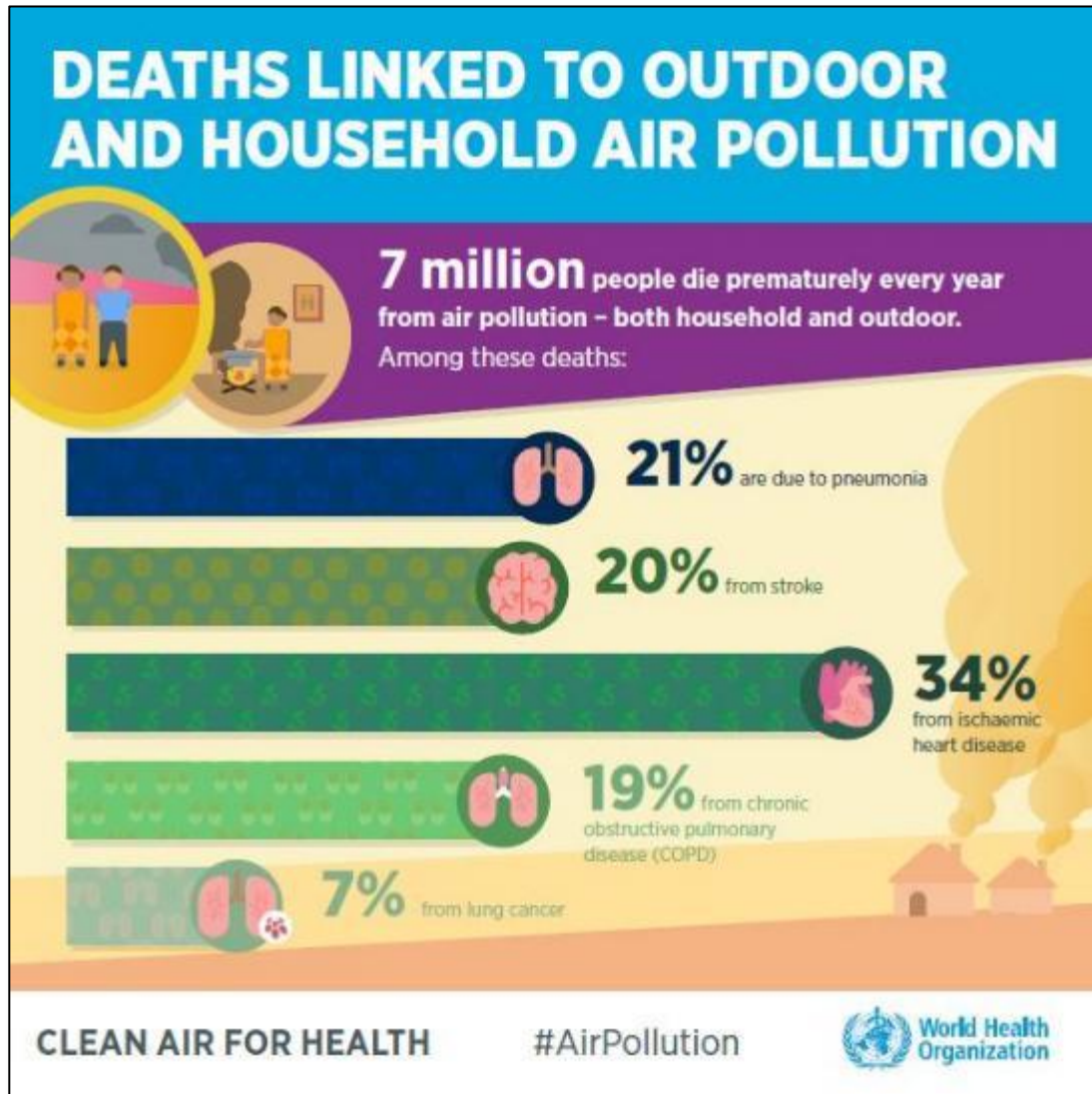
- $\text{PM}_{2.5}$ and PM_{10}
- Black Carbon

Main air pollutants and their effects



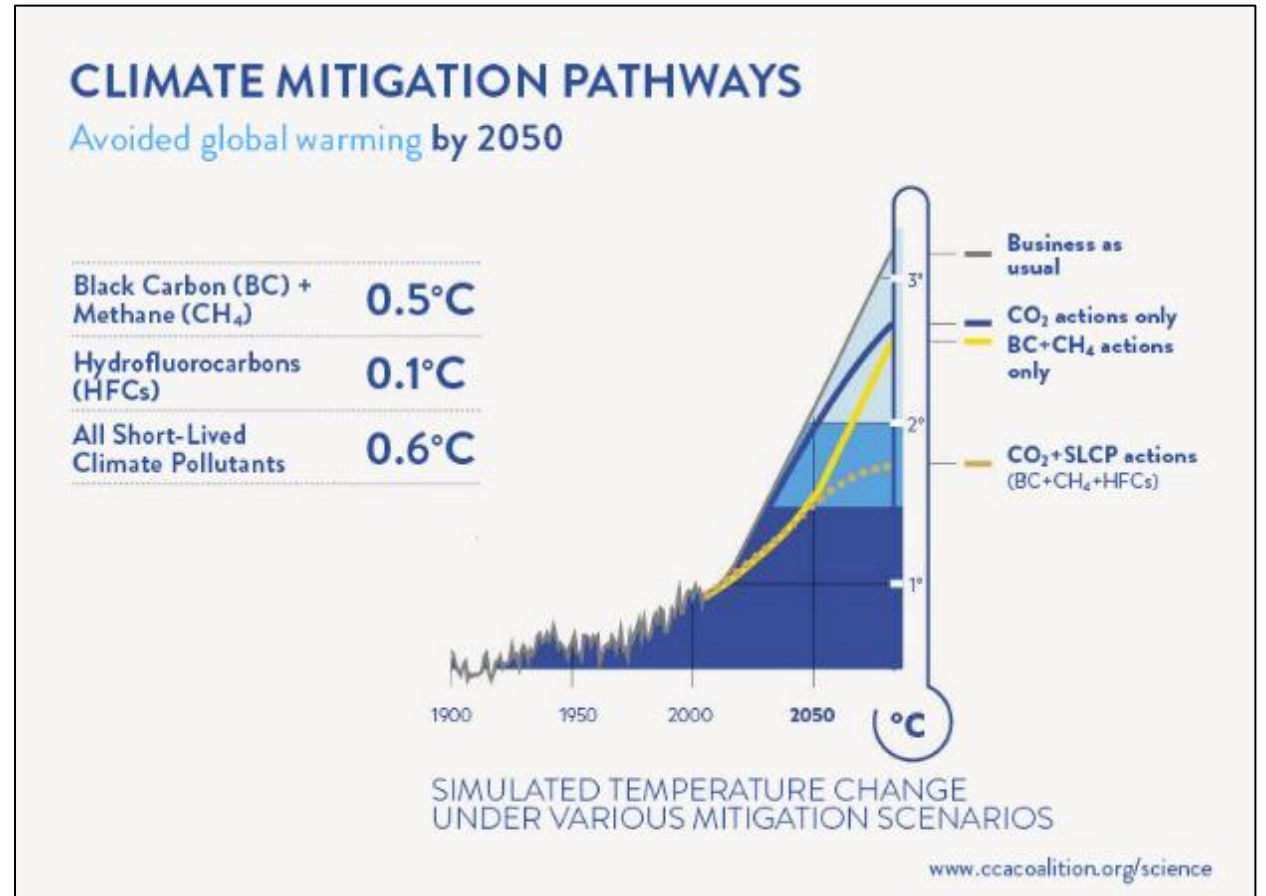
After Kuylenstierna & Malley

Health effects and sources of air pollution



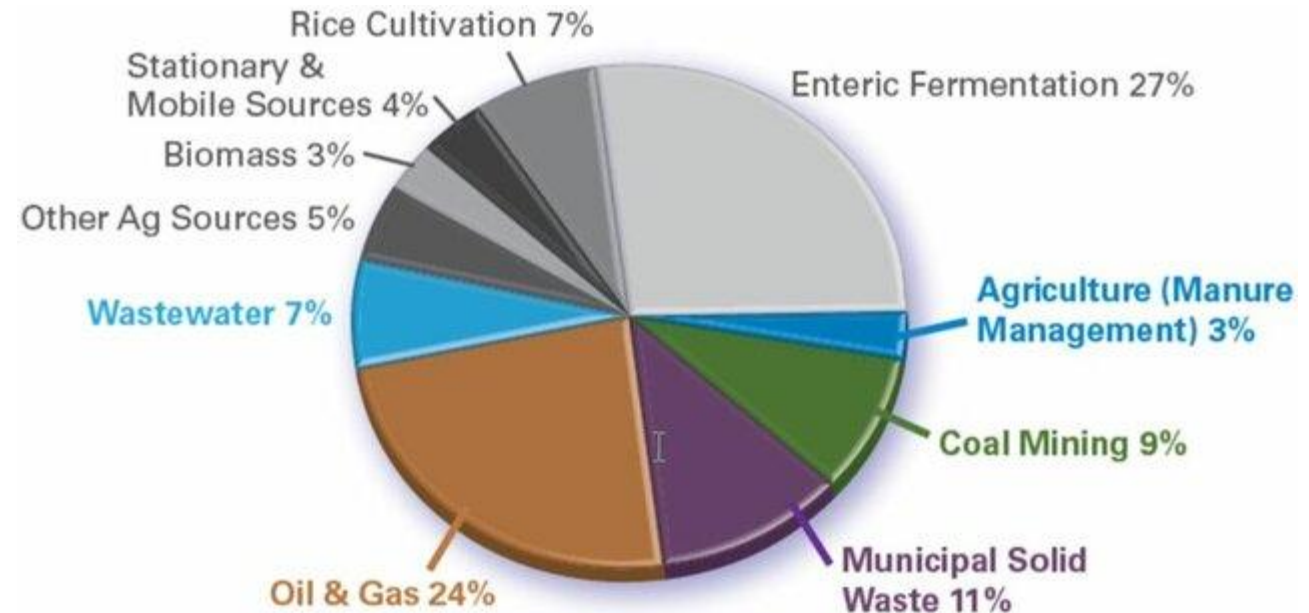
Air pollution and climate change

- Major air pollutants such as methane, black carbon, ozone and HFCs, also have a climate effect – hence their name short-lived climate pollutants (SLCPs) or super pollutants
- Paris Agreement targets cannot be achieved without reducing SLCP emissions (alongside CO₂ emission reduction)
- Reducing SLCP emissions can reduce temperature rise by approx. 0.6°C



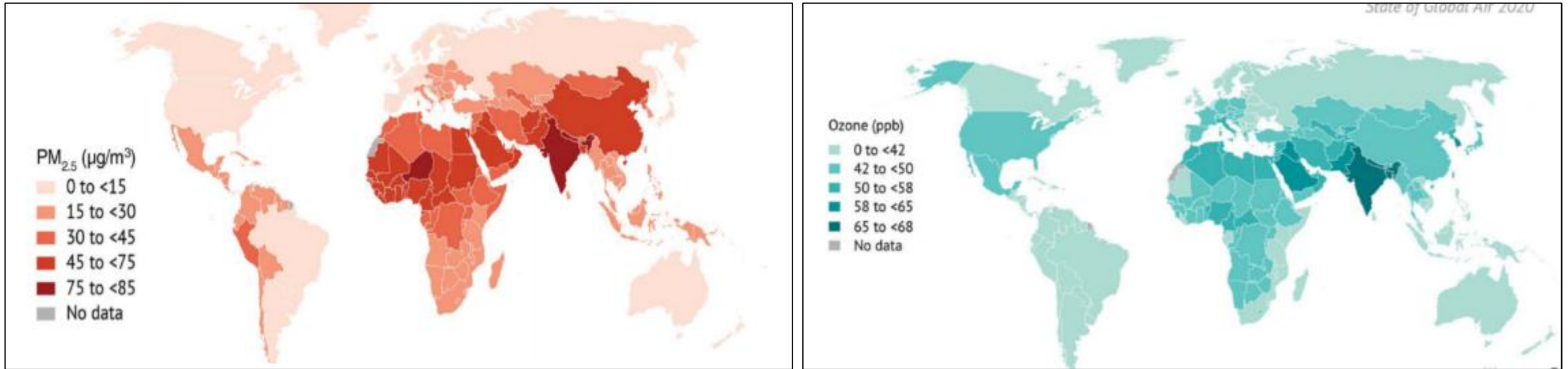
The role of methane (CH₄)

- Lifetime in atmosphere much shorter than CO₂, but much higher warming potential (traps radiation more efficiently) → Action has much quicker impact than reducing CO₂ emissions
- Sources predominantly anthropogenic, but also (semi-)natural (wildfires, wetlands, thawing of permafrost etc.)
- Increasing focus of policy debate and science since Global Methane Pledge was launched in 2021 (COP26)



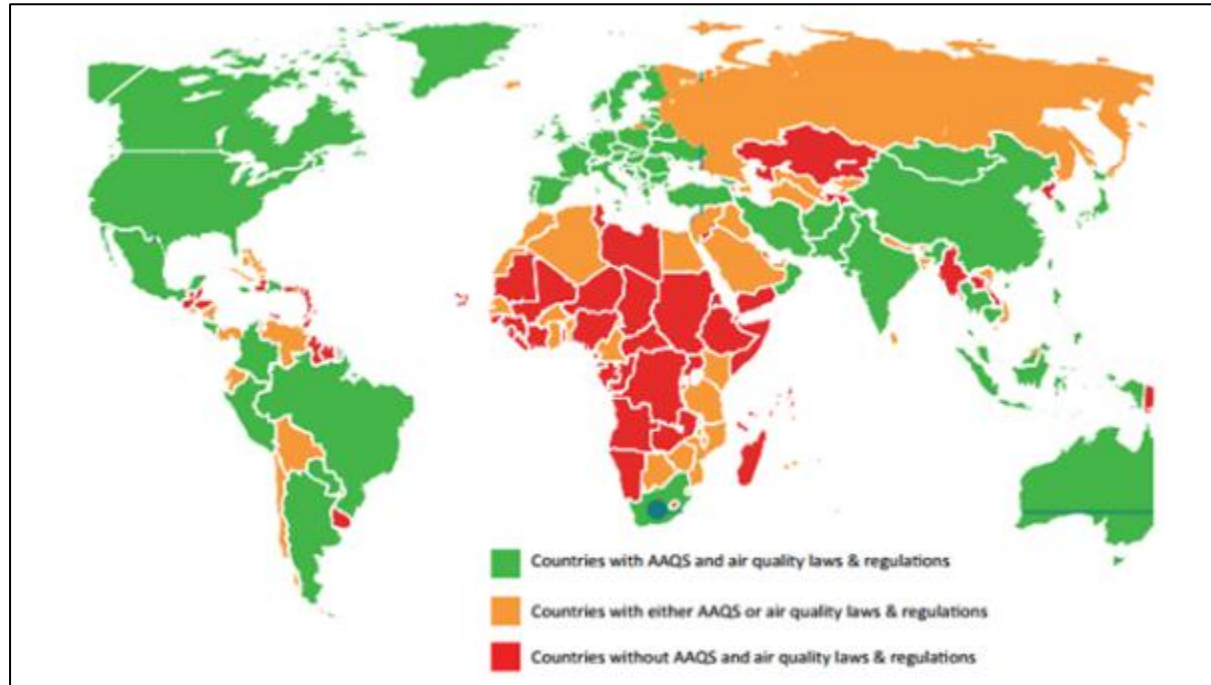
Estimated global anthropogenic methane emissions by source in 2020 (Wang et al., 2020)

Air Pollution as a challenge for developing countries



- 93 % of deaths attributed to air pollution in countries of **global south** (35% East Asia, 32% South Asia, 11% Africa)
- Particularly high linkage of **poverty and vulnerability** with exposure to air pollution
- Sources of pollution vary regionally and are highly context-dependent. In many developing countries, only **low political and social awareness** of the potential of air quality measures for sustainable development

Air Pollution as a challenge for developing countries (cont.)



- Air pollution as an "invisible" problem: **lack of evidence and monitoring** as a challenge - only a limited number of countries have reliable real-time measurement networks
- **Lack of policies and measures** to implement regulations:
 - **Low political will** due to conflicting political-economic interests
 - **limited capacities** in authorities and advisory institutions

General approaches GIZ proposes for tackling air pollution in developing countries

- Improved **environmental monitoring** (measurement networks; emission inventories, source apportionment)
- Stricter **environmental legislation** (incl. mandatory clean air plans) and law enforcement
- Emphasizing (economic) **co-benefits approaches: positive effects on human health, agriculture, ecosystems and the climate**
- Promotion of **no-burn agriculture, renewable energy production and environmentally friendly transport**
- **Information/awareness campaigns** for decision-makers and the population

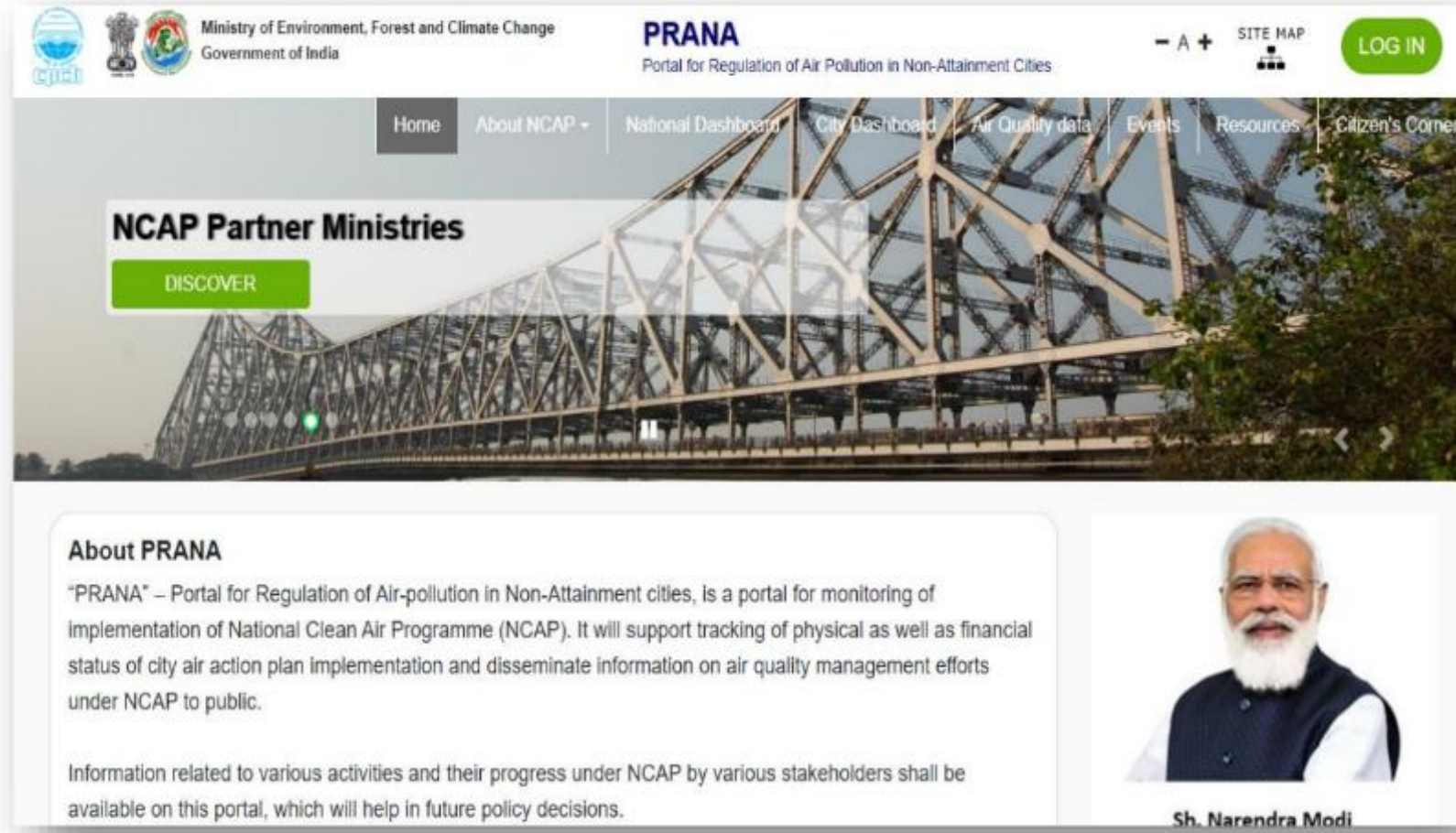


Ongoing or recently terminated GIZ projects on air quality management in Asia (as of May 26)

Project	Geography	Status	Funder / Commissioning Body	Lead Objective / Air Quality Relevance
SEACAI (Southeast Asia Climate and Clean Air Initiative)	Cambodia, Laos, Thailand, Viet Nam	Active (2025–2028)	BMZ (with Swiss DEZA co-financing)	ASEAN-wide (regional) air quality and climate coordination; capacity building in air pollution management. SEACAI
Environmental Protection Worldwide, India Air Pollution Control / NCAP Support	India;	Recently terminated (–2025)	BMUV (Export Initiative Environmental Protection)	Integrated environmental protection including air quality improvement components in India - supports India's National Clean Air Programme (NCAP) with monitoring, capacity building and policy support. (exportinitiative-umweltschutz.de)
SUM-ACA – Sustainable Urban Mobility (India)	India	Active (2022–2026)	BMZ	Promotes integrated urban mobility planning that addresses air quality and emissions. (GIZ)
AIRCARE – Advancing Integrated Solutions for Clean Air Restoration and Engagement	India (Indo-Gangetic Plain), Pakistan	Active* (2025-2027)	GIZ own funds (Eigenmaßnahme)	Supports implementation and coordination of air quality management under the World Bank's Air Quality Management in the Indo-Gangetic Plain and Himalayan Foothills programme — improving planning, stakeholder engagement and technical operations for air quality.
Promoting future-ready urban development in Central Asian cities	Kyrgyzstan; Tajikistan; Uzbekistan	Active (2025–2028)	BMZ	Sustainable & Climate-Sensitive Urban Development (Central Asia) Builds climate-sensitive urban planning capacities with environmental quality including air quality components. (GIZ)

PRANA – NCAP Programme Management Portal

- Supported in conception and PRANA development. Launched on September 07, 2022
- Continuous support in adding new features, and operational & maintenance support
- Robust intranet – 131 cities, 8 ministries, online approvals; dashboards on internet
- Messaging via portal
- All communication by cities, SCPBs etc. to be done only via PRANA (directed by CPCB in March 2022)
- Auto generation and distribution of monthly city reports and SMS alerts (under development)



Ministry of Environment, Forest and Climate Change
Government of India

PRANA
Portal for Regulation of Air Pollution in Non-Attainment Cities

Home About NCAP National Dashboard City Dashboard Air Quality data Events Resources Citizen's Corner

NCAP Partner Ministries
DISCOVER

About PRANA
"PRANA" – Portal for Regulation of Air-pollution in Non-Attainment cities, is a portal for monitoring of implementation of National Clean Air Programme (NCAP). It will support tracking of physical as well as financial status of city air action plan implementation and disseminate information on air quality management efforts under NCAP to public.

Information related to various activities and their progress under NCAP by various stakeholders shall be available on this portal, which will help in future policy decisions.

Sh. Narendra Modi

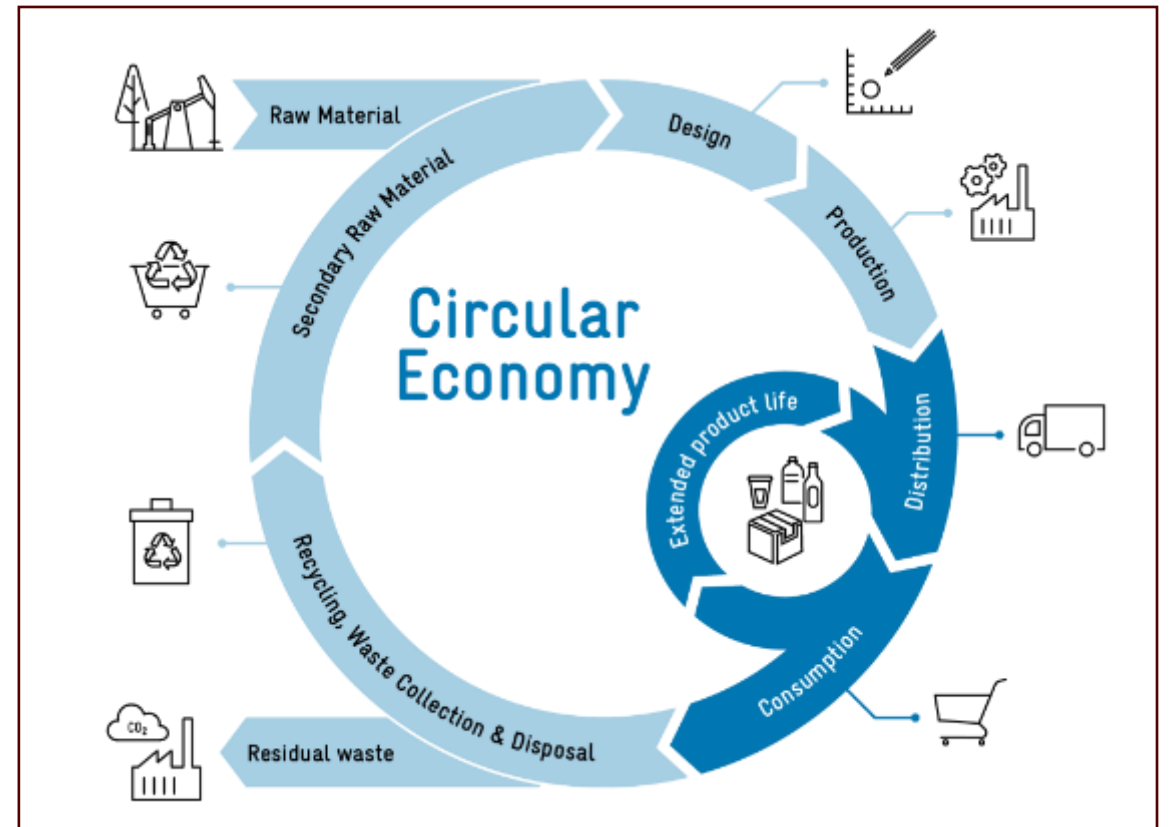
<http://www.prana.cpcb.gov.in/#/home>



Circular Economy

Supporting the global transition to a circular economy

The Circular Economy as a Paradigm Shift: From Linear to Circular, From Waste Management to the Circular Economy



Key objective: Preserving the value of products, materials, and resources.

The circular economy as a key topic for the future



- **Increasing resource use**
- **Less than 7% of materials are cycled back into the economy**
- **Environmental, biodiversity, and health risks**



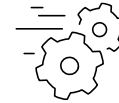
Circular Economy



Strong demand from partners



Ambitious regulatory frameworks and the EU as a leading market for circular economy approaches



Technological innovation and circular product design



Innovative financing and compensation systems



Digital solutions, e.g. sensors, tracking, and data transparency

The circular economy as a driver of progress

- Reduction potential of 39% of global **greenhouse gas emissions**
- New **jobs** in the repair, service, and recycling sectors
- Reduction of **resource scarcity** through by recovering and reuse of secondary raw materials



Policy framework

Global



EU

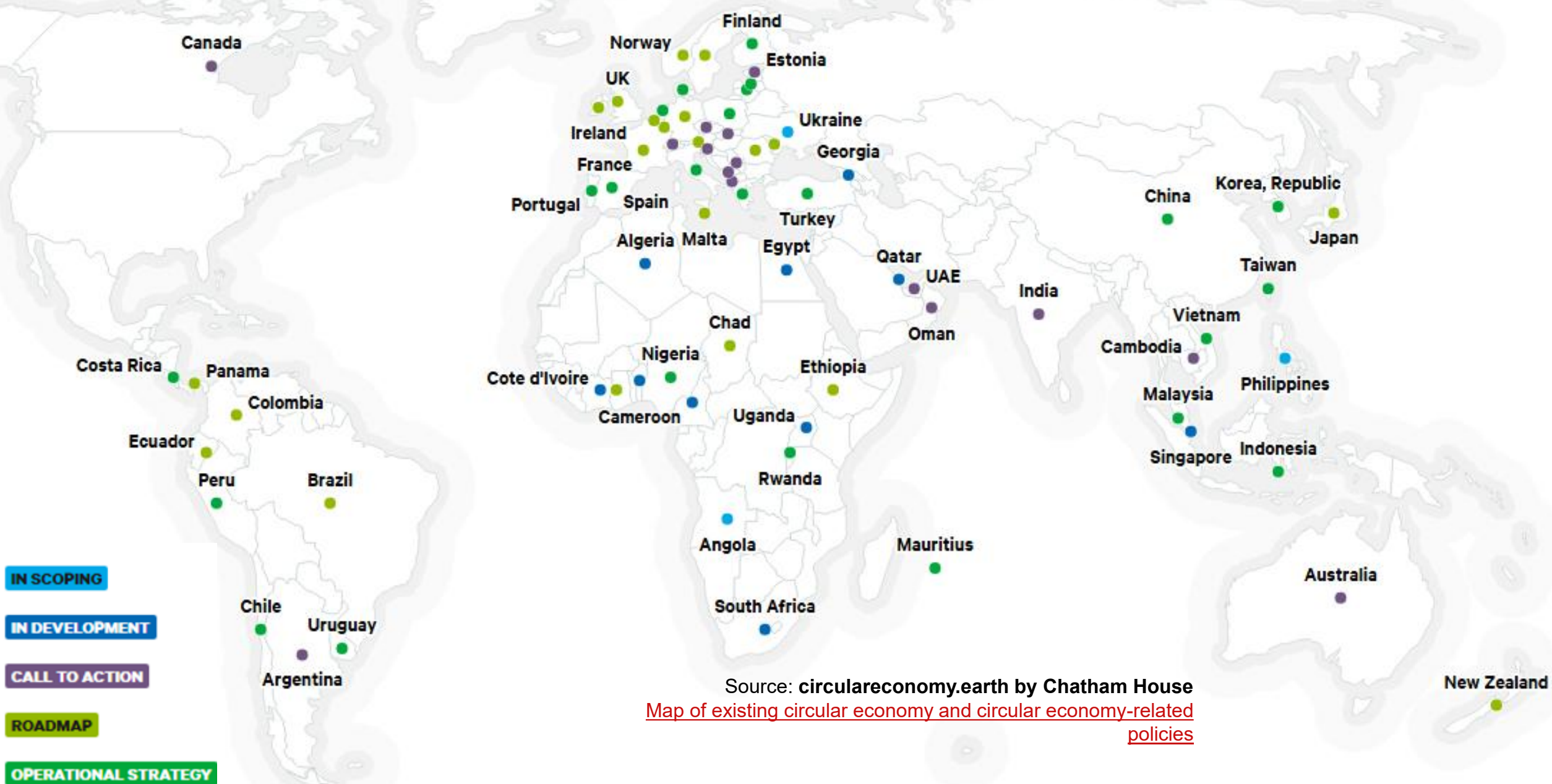


Southeast Asia



+ National Policies

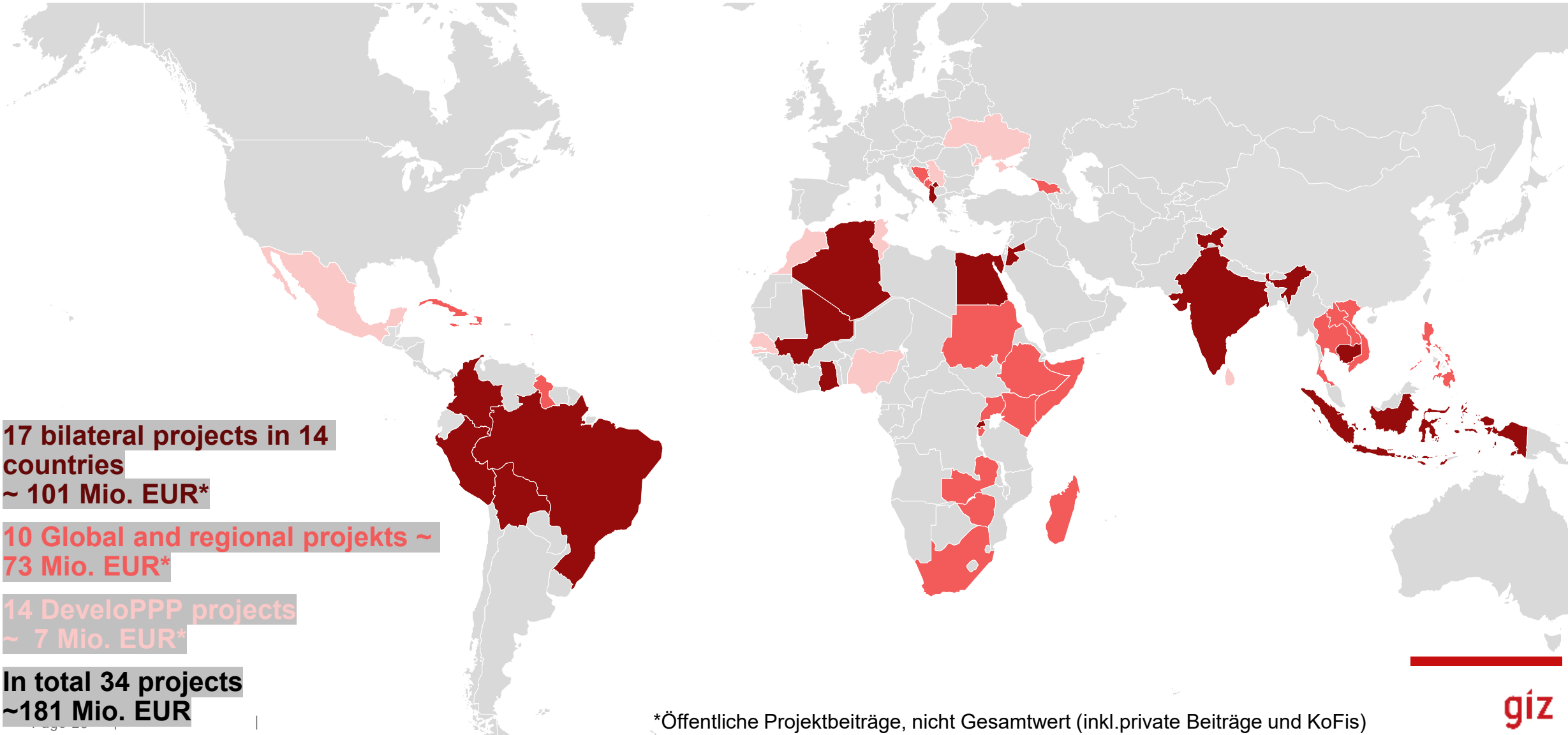
Policy strategies and measures for the circular economy



Source: [circular-economy.org](https://www.circular-economy.org/) by Chatham House
[Map of existing circular economy and circular economy-related policies](#)

GIZ (BMZ) Portfolio on Circular Economy (inkl. Co-financing)

04/2026



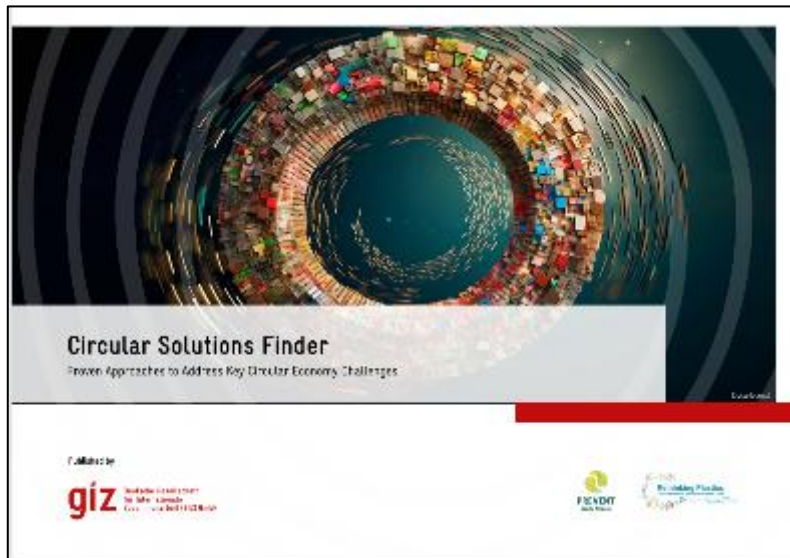
- 17 bilateral projects in 14 countries
~ 101 Mio. EUR*

- 10 Global and regional projects ~ 73 Mio. EUR*

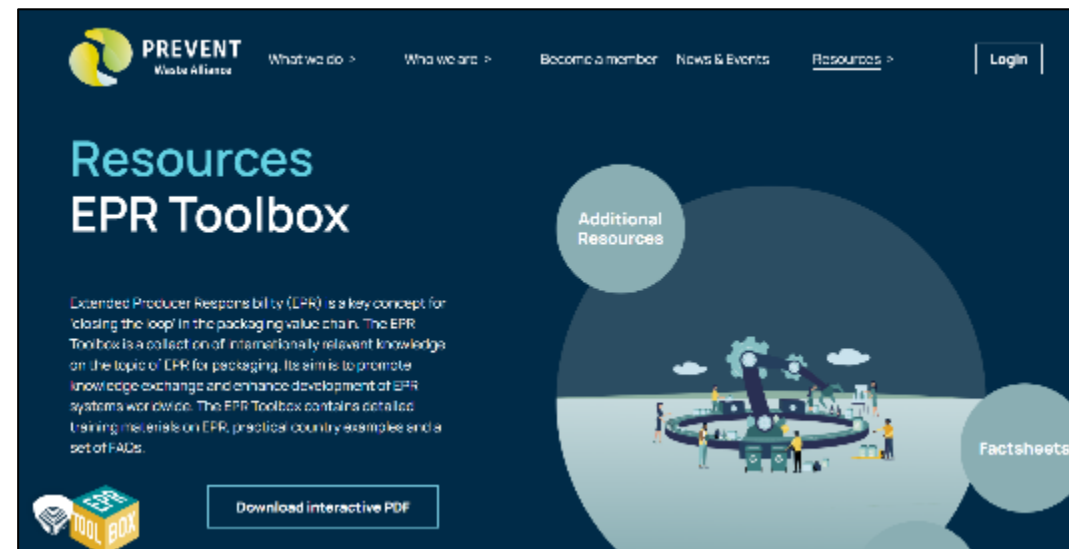
- 14 DeveloPPP projects ~ 7 Mio. EUR*

- In total 34 projects ~181 Mio. EUR

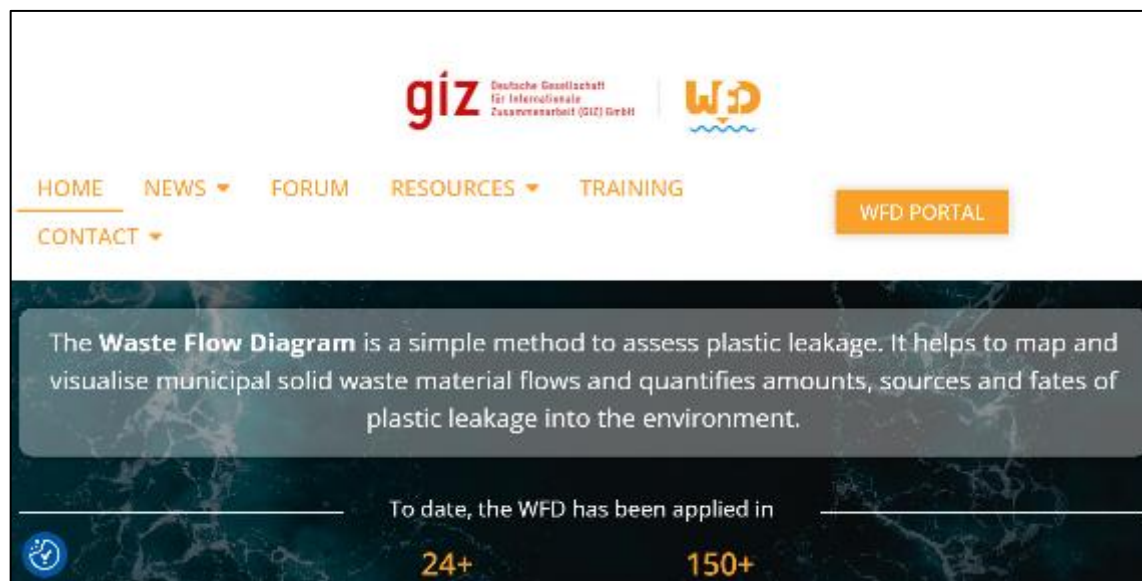
*Öffentliche Projektbeiträge, nicht Gesamtwert (inkl. private Beiträge und KoFis)



[Circular Solutions Finder](#)



[EPR Toolbox - Prevent Waste Alliance](#)



[Home - Waste Flow Diagram](#)

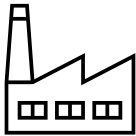
Outlook



Circular economy as an innovative area in which development cooperation can help shape transformation



High potential through circular economy innovations



Strong interest from partners and the private sector, enabling networks with businesses and investments



The EU is driving the circular economy agenda forward and is a key donor

Thank you!

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