

Executive Summary

Working together to achieve the Paris climate goals and sustainable development

International climate cooperation and the role of
developing countries and emerging economies

August 2021



d.i.e

Deutsches Institut für
Entwicklungspolitik



German Development
Institute

NEW
CLIMATE
INSTITUTE

Executive summary

Climate change alters the framework conditions for sustainable development

Climate change has become a threat to all countries and societies. Average global temperature increases currently stand at just above 1°C compared with pre-industrial levels, and while the mounting consequences of global warming are already visible today, this is set to rise further.

A temperature increase of just 1.5°C is likely to cause dramatic and irreversible changes in the Earth's climate system. An increase above this may turn climate change into an unmanageable risk for humankind. This is likely to significantly affect many people in developing countries and emerging economies, whose livelihoods would be most at risk.

Sustainable development requires that the climate system be stabilised between 1.5°C and 2°C of average global warming. This necessitates a drastic reduction in global greenhouse gas emissions. Developing countries and emerging economies are increasingly the focus here. These nations already account for two-thirds of global emissions, primarily due to their growing energy demands.

Failure to achieve the goals of the Paris Agreement would ultimately undermine the achievement of just and sustainable global development that leaves no one behind. A development-oriented strategy that achieves the necessary reduction in emissions requires both climate change mitigation and development cooperation across policy fields. Tackling the now unavoidable impacts of climate change must also include matters related to land use, marine conservation and global trade.

The Paris Agreement and the 2030 Agenda for Sustainable Development provide the necessary objectives and normative foundation for political action. Consistently implementing the objectives of both agendas is the key challenge for international policymakers, global corporations and for communities. In this context, it is necessary to keep all countries and population groups in view, aligning with the requirement of leaving no one behind.

This study shows how transformative change can bring about sustainable development, prevent climate change from spiralling out of control and address the unavoidable consequences of climate change in a development-friendly manner.



The Paris Agreement: where are we five years later?

The Paris Agreement requires all countries to make increasingly ambitious efforts to stabilise the climate well below 2°C of pre-industrial levels and preferably below 1.5°C. At the same time, it stresses the responsibility of every nation to achieve this goal through nationally determined contributions (NDCs) and requires them to develop adaptation plans to cope with the consequences of climate change. Equally, it underscores the need to gear global financial flows to these objectives and requests that wealthy nations assist poor and climate-vulnerable countries in realising their climate policies.

The leaders of COP21, the United Nations climate change conference, celebrate the adoption of the Paris Agreement on Climate Change on December 12, 2015.
Photo by Alamy Stock.



In 2016, the Paris Agreement was ratified in record time and entered into force. As such, the first cycle of raising national ambitions began in 2020. Originally submitted in 2015, the NDCs still remain significantly lower than the ambition level of the Paris Agreement. Based on current climate policies and those relative to limiting global warming to 1.5°C, there is an emissions gap of 47-gigatonnes of carbon dioxide equivalents in regard to 2050 targets.

Global greenhouse gas emissions have continued to rise, reaching 55-gigatonnes in 2018 alone. Emissions from developed countries have been stagnating at elevated levels. Emissions from developing countries and emerging economies continue to rise and currently account for around two-thirds of annual global greenhouse gas emissions.

Upper-middle income countries are currently the main drivers of growth in global emissions. In the medium term, lower-middle income countries and poorer developing countries will also make a significant contribution to global emissions.

The atmosphere does not distinguish between North and South. It is therefore necessary to account for the importance of developing countries and emerging economies when it comes to successfully implementing the Paris Agreement. Historically, the main drivers of climate change are industrialised countries who bear a significant responsibility in tackling climate change. At the same time, it will not be possible to achieve the goals of the Paris Agreement without decisive action on the part of developing countries and emerging economies.

Despite the global economic downturn in the wake of the COVID-19 pandemic, global emissions continue to rise. At the same time, in many countries, the pandemic is slowing international climate action processes and delaying the formulation of new and more ambitious climate objectives. As of May 2021, the NDCs submitted by a total of 55 countries, including the European Union (EU), account for just under half of global greenhouse gas emissions.

Historical and projected GHG emissions

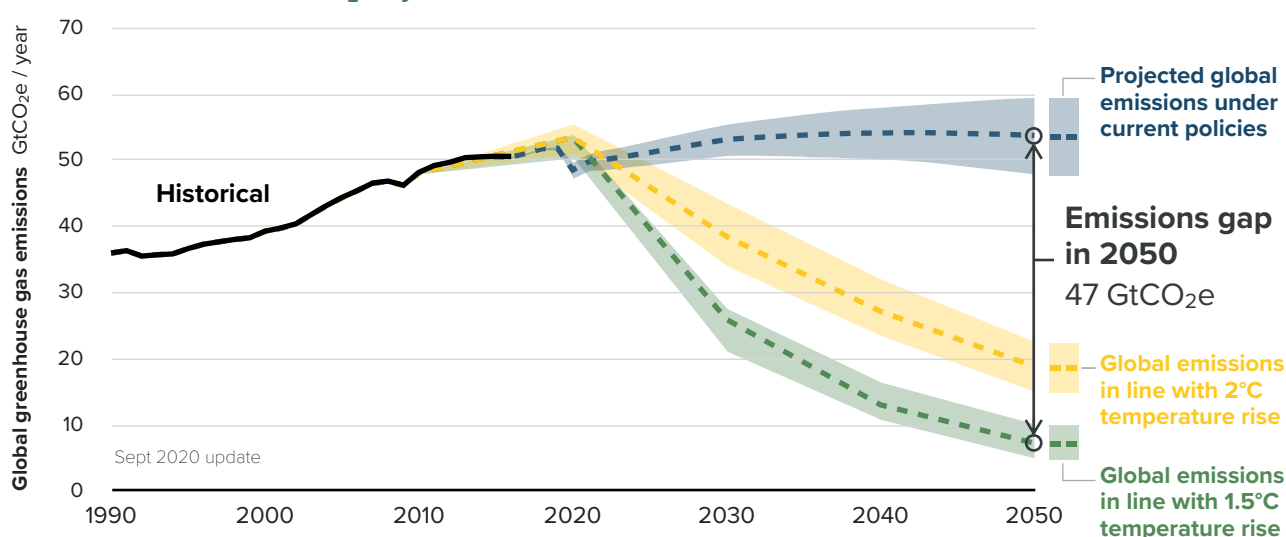


Figure A
Historical
and projected
global GHG
emissions, under
current policies
and different
temperature
pathways. Source:
Climate Action
Tracker 2020.

There is also a significant shortfall in achieving the Paris Agreement's goals for climate change adaptation. Only 20 countries have submitted detailed national adaptation plans (NAPs), and only one-fifth of global climate finance is invested in adaptation action. It is also conceivable that international climate finance will fall short of the USD 100 billion announced by industrialised nations for the period from 2020 onwards, despite substantial increases in recent years.

The period between now and 2030 is crucial if we are to achieve the goals of the Paris Agreement and developed countries must lead the way. At the same time, they must provide and support incentives for transformative policymaking in developing countries and emerging economies. This can be achieved by stepping up relevant policy dialogue, mobilising substantial financial resources, driving green technology transfer and supporting capacity development.

Raising the ambition levels of developing countries and emerging economies depends largely on the political will in those nations and on them having predictable and reliable support from their international partners. Even outside of a development cooperation setting, all international cooperation should be geared to the implementation of national climate policy. This should be in the context of the Sustainable Development Goals (SDGs) and the multilateral agreements on the conservation of biodiversity. Political priorities, general conditions and investments should be geared to these requirements, and corresponding adjustments are to be made in all countries and at all levels of action.

In this context, tackling the challenges of climate change and sustainable development in a decisive and credible way is as much an issue of national self-interest as it is an imperative of international solidarity.

GHG emissions by country and region

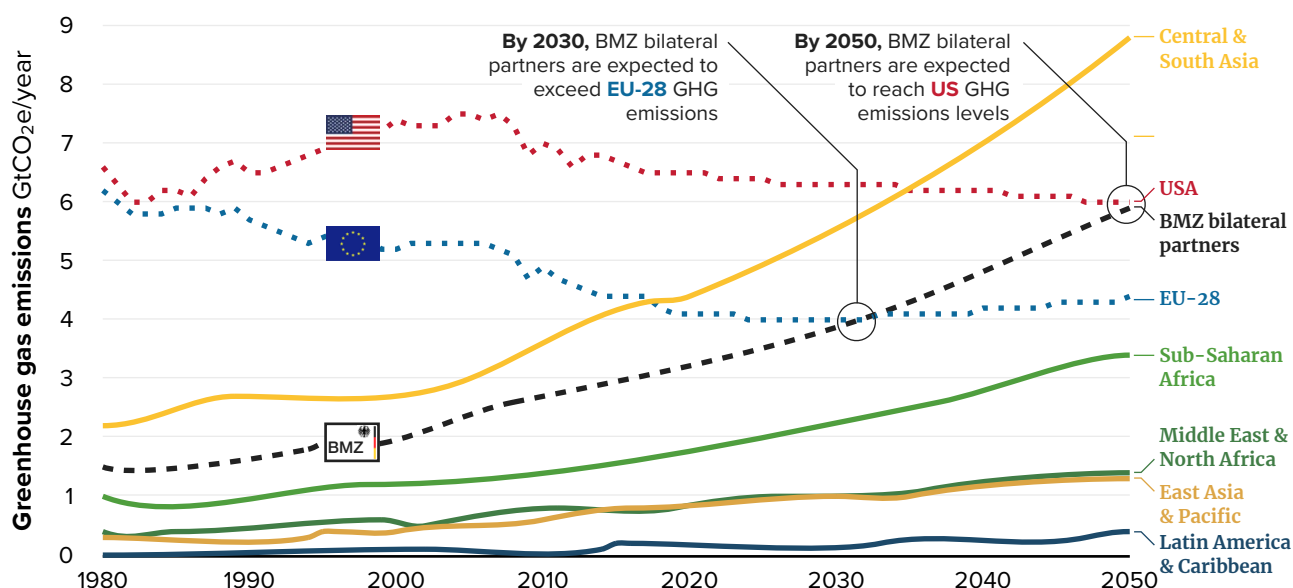


Figure B

Historical and expected greenhouse gas emissions from low and middle income countries per region and in comparison with bilateral partners of the BMZ, the EU-28 and the USA.

Source: Gütschow *et al.* 2020.

Why are current efforts still insufficient?

If implemented in full, current NDCs are expected to result in an average global temperature increase of 3°C or more by the end of this century. Worse still, the climate policy announcements of many countries are not being implemented consistently. In many places, translating the submitted NDCs into practical policy measures, national development plans, sufficient investment and regulatory framework conditions is a major challenge.

By international standards, many emerging economies with rapidly rising emissions still consider themselves to be developing countries. They view climate change mitigation as an additional burden and see themselves as entitled to continue emitting greenhouse gases. Consequently, they are reticent when it comes to raising their ambitions and supporting international commitments. Additionally, parts of their national commitments are conditional and subject to international support.

Many countries are acting inconsistently. On the one hand, they set themselves ambitious goals, for instance, by introducing carbon prices and climate risk insurance schemes. On the other hand, they still invest in the expansion of fossil-fuel-based energy systems and conventional urban development. This is where international cooperation needs to identify and support alternatives in order to reverse emission trends permanently.

In many developing countries and emerging economies, opportunities for using climate policy to enhance competitiveness and development go unnoticed. Given other pressing challenges right now, adaptation requirements and climate-related risks are rarely a priority for national governments. These governments are only slowly coming to recognise that climate-friendly investments would not only be more cost-efficient in the long term but can also create new prospects for innovation, growth and employment.

Most of the Parties to the Paris Agreement still have a long way to go in terms of achieving greenhouse gas neutrality. In summary, both the major emitters and many smaller developing countries and emerging economies must back up their commitments to the Paris Agreement with the corresponding action.

How can we build upon what has already been achieved?

A number of individual countries are already pursuing long-term strategies for decarbonising their economies. The EU and China point in this direction. The new EU climate target is at least a 55% reduction in emissions by 2030 compared with 1990 and climate neutrality by 2050. China announced a target of peak emissions before 2030 with carbon neutrality by 2060. The return of the United States to the Paris Agreement further raises hopes, as do the NDCs submitted by many developing countries and emerging economies since 2015 that also contain some promising approaches.

Declarations of intent by 127 countries on achieving net-zero carbon emissions currently account for around 63% of global emissions. Consistently implementing these declarations of intent would bring the international community closer to limiting global warming to 2°C. However, only a very small number of countries have enshrined their declaration of intent in national law or translated it into long-term strategies (LTSs) to date.

At subnational government levels, civil society and private-sector players, as well as global public administrations, are also making key contributions. They are increasing the pressure on the Parties to the Paris Agreement to act and make a practical contribution to raising ambition in many developing countries and emerging economies through their independent climate action.

The goals of the Paris Agreement are inextricably linked to the 2030 Agenda for Sustainable Development. The necessary dynamics for implementing the Paris Agreement can only further unfold if developing countries and emerging economies recognise that determined climate policy can promote their national development ambitions rather than hinder them. Many players are coming to realise that successful climate policy can only be achieved in accordance with the SDGs.

There is growing international recognition of the importance of sustainable land use and marine conservation. Ecosystems such as forests, wetlands, seagrass beds and mangroves currently capture around half of human carbon emissions from the atmosphere. These natural carbon sinks provide the basic conditions for sustainable development, climate change mitigation and ecosystem-based climate adaptation and warrant protection.

There is great potential in global efforts to combat the COVID-19 crisis. For instance, to overcome the economic and social consequences of the crisis, resources are being mobilised on a scale never seen before. This makes it possible to ‘build forward better’ by investing in climate change mitigation and climate-resilient and crisis-proof development.

To address these challenges effectively, it is necessary to leverage the potential and experience of international cooperation to pave the way for implementing the Paris Agreement and 2030 Agenda. Environmental or energy partnerships are limited in their sectoral scope. In contrast, development cooperation adopts a more comprehensive approach. This allows key players such as ministries of finance and planning to be brought on board for the implementation of transformative policies. Additionally, thanks to its alliance with multilateral financial institutions, development cooperation has the necessary leverage to influence general conditions at the international level, all in alignment with the goals of the Paris Agreement and the SDGs.

What needs to be done now?

Pursuing integrated approaches to climate policy and sustainable development

There are already many well-known cross-cutting solutions between development policy and climate policy. The expansion of renewable energies, for instance, can reduce greenhouse gas emissions. At the same time, they can support the achievement of different development goals in the areas of healthcare, education, domestic industrial development and job creation. Current solutions need to be integrated to a greater extent and leveraged for comprehensive systemic transformation that will facilitate the achievement of the goals of the Paris Agreement and the 2030 Agenda.

This will only succeed if effective incentives are provided for a significant course correction in developing countries and emerging economies, too. This, of course, runs alongside the transformation efforts in industrialised nations. In addition to policy dialogue and finance, these include the transfer of relevant technology and capacity development. In order to ensure consistent external action, corresponding measures, primarily those which are development-related, must be supported by other international cooperation instruments. These include trade issues and export promotion.

The formulation of increasingly ambitious NDCs is instrumental for this kind of course correction and for achieving the goals of the Paris Agreement. Within the ambition cycle of the Paris Agreement, supporting developing countries and emerging economies in developing goals in line with their national development agendas is just as important as identifying financing and decisively implementing corresponding measures.

Links between NDCs and SDGs



Figure C
Climate activities included in NDCs and their link to the SDGs at the global level. The bars indicate the share of NDC activities relevant to the SDG targets (adapted from NDC-SDG Connections tool, www.ndc-sdg.info).

Setting a course at the international level

Concluding negotiations on market mechanisms swiftly and in the interests of a robust interpretation of Article 6 of the Paris Agreement would indicate a decisive step in terms of a multilateral climate policy. A corresponding outcome from the forthcoming UN climate change conference COP26 in November 2021 would be the mobilisation of substantial additional finance to support developing countries and emerging economies.

An upward trend in international climate finance would send a confidence-building signal to the international community and is likely to create a greater openness to transformation on the part of developing countries and emerging economies. This trend could, for instance, involve the achievement of the USD 100 billion per annum from 2020, as promised by industrialised nations. As a result, increased scope for financing conditional action in the context of developing countries' NDCs could be achieved.

Systematically incorporating climate risks

When it comes to implementing national climate policy in the interests of sustainable development, it is also necessary to take systematic account of climate risks. This applies to development planning and corresponding investments at all levels of political action and in all sectors. It requires robust and forward-looking risk analyses, early-warning systems and climate-risk insurance, for which the necessary capacity must be built. This includes within multilateral development banks and in the partner countries themselves. These are the key requirements for comprehensively addressing climate and disaster risks and for the resilience of the development efforts in the face of the unavoidable consequences of climate change.

Creating frameworks for strong national engagement

Creating the right frameworks locally in order to strengthen a sense of ownership and capacity to take action on the part of developing countries and emerging economies is the top priority. In this way, structures and institutions could be established in the long term for successful and independent national climate policy. This would be supported technically and financially through development cooperation, though it requires ownership within the countries to yield a sustainable impact.

Global energy consumption is pivotal for securing a stable climate. In order to achieve a rapid transition to a carbon-neutral global economy, it is necessary to reduce the supply of and demand for emission-intensive energy systems. This could be promoted through regulatory frameworks and price signals as well as through targeted linking of international financial conditions to export credit guarantees and the abolition of subsidies for fossil fuels. Given the dynamic growth in energy demand in developing countries and emerging economies, a great deal of action is required.

The roll-out of effective carbon pricing has a crucial role to play, most likely being the biggest political lever for efficient global emissions reduction. Development cooperation can play a key supporting role in introducing corresponding instruments in developing countries and emerging economies and for the design of international emissions trading.

Identifying and prioritising promising action areas

In addition to these overarching approaches, individual action areas at the interface between climate policy and sustainable development are highly relevant. The most notable of these action areas are global energy production, the political design of urbanisation, sustainable agriculture, forest and ecosystem conservation, and the management of global freshwater resources.

In order to develop the greatest possible impact in the short and medium-term and boost impetus for comprehensive change towards climate-friendly sustainable development, they should be afforded particular attention and prioritised accordingly. International cooperation can provide incentives in this context and assist developing countries and emerging economies initiate and support these kinds of systemic transformations locally.

There are already many vantage points for international climate cooperation with developing and emerging countries. Their central role in achieving the goals of the Paris Agreement can therefore be strengthened in a sustainable manner. Provided the political will is there on the part of the partner countries and the respective national frameworks are created, these action areas offer numerous options for intervention. This could effectively leverage the potential and experience of agents of international cooperation. The following recommendations serve as examples and are spelled out in detail in this study.



Modernising energy production around the world

A reliable supply of and affordable access to clean energy are crucial requirements for achieving sustainable socio-economic development, combating poverty and reducing societal inequality. At the same time, global energy consumption accounts for around 70% of global carbon emissions, with 25% coming from electricity generation alone. Growth in energy demand is dynamic, especially in developing countries and emerging economies.

Priorities for action

- **Supporting the leapfrogging of technical development steps in favour of renewable energy systems** in order to displace fossil fuels, particularly through decentralised solutions in rural areas and mobilisation of the private sector.
- **Identifying local alternatives to fossil fuel energy production** and promoting new technologies (such as green hydrogen production), adapted supply chains and regional energy corridors to exploit the potential for renewable energy.
- **Establishing and strengthening inclusive institutions** in order to shape local and national system change in the energy sector to moderate conflicts of interest for the benefit of all.
- **Consistently gearing international cooperation projects in the energy sector** to climate neutrality.

Wind and solar power generation. Photograph: Mel Stoutsenberger



Making urbanisation climate-friendly

Urban areas already account for three-quarters of global energy-related carbon emissions. By 2050, around two-thirds of the world's population will live in cities, driven by rapid urbanisation in Africa and Asia in particular. As these cities grow, so too does their climate-policy relevance.

Priorities for action

- **Promoting low-emission urban mobility** through electrified local public transport powered by renewable energy and improved transport infrastructure for pedestrians and cyclists. For example, through integrated spatial planning.
- **Investing in climate-friendly and climate-resilient urban infrastructure and buildings** that prevent emission-intensive path dependencies in urban development, take account of climate risks and also afford marginalised groups access to relevant infrastructure. For example, through the upgrading of informal settlements and slums.
- **Promoting inclusively planned adaptation measures** in order to boost the urban population's resilience to climate-related risks and foster social cohesion. For example, via participatory elements such as citizens' councils and the use of social media.
- Providing targeted support to help urban stakeholders **identify and exploit the potential of their cities as centres of sub-national climate policy**. For example, through twinning agreements.

Solar panels for supplying own necessity of electricity in the city. Photograph: BrazilPhotos



Safeguarding global food security with low emissions

Agriculture is the key sector in many developing countries and emerging economies and is crucial to the food security of an ever-growing global population. At the same time, around 80% of the world's total agriculture-based greenhouse gas emissions originate from developing countries and emerging economies. Increasing agricultural production in order to safeguard global food security while also reducing agricultural emissions is one of the key challenges in sustainable development.

Priorities for action

- **Promoting the acceptance and dissemination of climate-friendly and climate-safe technologies and practices** in agricultural production in order to increase yields in a way that allows emissions intensity to be reduced and resilience boosted.
- **Improving access for smallholders to loans and insurance** in order to mobilise sustainable investment and safeguard value chains.
- **Combining supply- and demand-side measures** to reduce emissions from meat and dairy production, primarily through sustainably intensifying livestock farming in developing countries and switching to plant-based alternatives and deforestation-free and climate-neutral products in industrialised nations.
- **Stepping up efforts to prevent harvest losses and waste**, primarily through improved, low-emission cooling and storage options in developing countries and through greater consumer awareness among the urban middle classes.

Everyday life for farmer with cows in the countryside. Photograph: DCPhoto



Conserving forests and ecosystems

Unspoilt ecosystems are the natural foundation for human development. In addition to numerous vital ecosystem services, forests, wetlands and oceans also serve as carbon sinks, capturing around half of human carbon emissions from the atmosphere. By implication, the destruction of ecosystems leads to a higher concentration of greenhouse gases in the atmosphere. Key natural carbon reservoirs are found within the territories of developing countries. Around 7% of global carbon emissions can be traced back to deforestation in the tropics alone.

Priorities for action

- **Improving the integration of species protection, ecosystem conservation and climate policy**, most notably through consistent mutual consideration of species protection issues in climate finance and climate-change impacts in biodiversity finance.
- **Minimising deforestation of tropical rainforests** by regulating global markets for relevant primary goods and creating incentives for **deforestation-free supply chains**. For example, by promoting remote sensing systems and industry standards for supply chains.
- **Clarifying and safeguarding local communities' land rights** in order to strengthen their sense of responsibility for protecting their forest resources, especially in conservation areas.
- **Taking greater account of indigenous and local knowledge** to improve the conservation and sustainable use of natural resources and increase the involvement of indigenous and local communities in environmental policy in the interests of sustainable land use.

Logging in lowland rainforest in Sabah Borneo. Photograph: Mint Images



Taking account of sustainable water use

Water is the basis for all life on planet Earth and a prerequisite for human development. Four billion people, primarily in developing countries, have no safe access to clean water and therefore have limited development prospects. Climate change threatens to exacerbate this situation further. At the same time, many forms of human water use are energy-intensive and generate additional greenhouse gas emissions.

Priorities for action

- **Promoting more efficient water use**, in particular by introducing and disseminating water-saving technologies in water-intensive sectors such as agriculture and urban development.
- **Strengthening integrated water resources management (IWRM)**, in particular through developing capacity for monitoring water resources and infrastructure.
- **Reducing greenhouse gas emissions from wastewater and sludge**, in particular by promoting technical and institutional solutions for reducing, processing and reusing wastewater. For example, by using newly established wetlands.
- **Supporting governance reforms in the water sector** designed to overcome institutional fragmentation and opposing interests in the multi-level system and strengthening water security for marginalised groups.

Woman filling up canisters with clean water. Photograph: SOPA Images Limited



Working together to achieve the Paris climate goals and sustainable development:

International climate cooperation and the role of developing countries and emerging economies

Steffen Bauer
Marie-Jeanne Kurdziel
Gabriela Iacobuta
Clara Brandi
Jean Carlo Rodríguez

Delphine Deryng
Jonas Hanshom
Niklas Höhne
Sybrig Smit
Srinivasa Srigiri



The views and assumptions expressed in this report represent the views of the authors and not necessarily those of the client.

Commissioned by the German Ministry for Economic Cooperation and Development (BMZ), financial support by BMZ is gratefully acknowledged.

Supported by:





Attribution 4.0 International

(CC BY 4.0)

Except as otherwise noted this publication is licensed under Creative Commons Attribution. You are free to copy, communicate and adapt this work, as long as you attribute the German Development Institute / Deutsches Institut für Entwicklungspolitik (DIE) and the authors.

DOI: 10.23661/r3.2021

**German Development Institute /
Deutsches Institut für Entwicklungspolitik GmbH**



Tulpenfeld 6, 53113 Bonn, Germany



+49 (0)228 94927-0



+49 (0)228 94927-130



die@die-gdi.de



<http://www.die-gdi.de>



<https://t1p.de/IC-PA>