





In 2015, the international community reached a consensus through the Paris Agreement, to limit the global temperature rise to 1.5 degrees Celsius compared with pre-industrial times. The latest IPCC report clearly indicates the necessity of this undertaking: only if global greenhouse gas (GHG) emissions are halved by 2030 can the damage and risks of global warming be reduced. Achieving the 1.5-degree target necessitates a fundamental shift in global climate policy. A key contribution to this goal is the global energy transition from fossil fuels towards renewable energy and improved energy efficiency.

A global trend reversal in the energy sector is necessary

The energy sector serves as a pivotal starting point, given that more than 40 per cent of global GHG emissions originate from this domain. The areas key to the transformation of the sector include the decarbonisation of the energy supply, increase in energy efficiency and conversion of industrial processes. In particular, the use of solar and wind power, improving energy efficiency and the electrification of industrial processes, heating and transport are technically feasible and increasingly cost-efficient.

More than 90 percent of the countries have already announced actions for the decarbonisation of the energy supply in their Nationally Determined Contributions (NDCs). Unfortunately, the first Global Stocktake (GST) clearly

demonstrates that the mitigation targets anchored in the NDCs are currently not sufficient to limit the global temperature rise to 1.5 or 2 degrees Celsius (see <u>UNFCCC Synthesis Report</u>). The current NDCs can only close the <u>mitigation gap</u> by 15 to 33 per cent. Therefore, both the NDCs and the Long-term Strategies (LTS) require significant ambition raising measures to implement the Paris Agreement.

A global target for renewable energies and energy efficiency

In order to limit the rise in temperature to 1.5 degrees Celsius, the expansion of renewable energies and energy efficiency must be accelerated (see World Energy Outlook Report 2023). Calculations by the International Energy Agency (IEA) indicate that this will require a dramatic acceleration in the expansion of renewable energies by 2030. This means, the tripling of installed renewable energy capacities to more than 11 TW, the doubling of annual progress in energy efficiency and a gradual phase-out of fossil fuels.

This also requires the re-channelling of global financial flows towards renewable technologies. In 2022, a global record of 1.3 trillion USD were used in subsidies for fossil fuels. In addition, a stronger commitment of governments is necessary in order to boost the resilience of technology supply chains, such as wind turbines.

Just transition in the energy sector

The restructuring of energy systems and markets is challenging, especially with regard to the technological and socio-economical aspects. Projects of the International Climate Initiative (IKI) aim to support the energy transition in partner countries and implement it in a socially just manner ("Just Transition"). In IKI projects, dialogues are initiated between government, administration, employers, unions and commercial enterprises, in order to consider long-term socio-economic aspects - including local jobs, regional structural change, environmental impacts and healthcare provision. Technical and policy consulting as well as further education and training for various actors play an important role in this.

For example, the IKI supports partner governments in Indonesia, South Africa and Vietnam as part of the Just Energy Transition Partnerships (JETP), in order to participate in shaping economically feasible, specific solutions and examples for the decommissioning of coal infrastructures, while at the same time developing a sustainable system for the expansion of renewable energies. In order to mitigate the social impacts for the population in coal-intensive regions, flagship projects are developing packages of measures that create sustainable prospects in these regions by means of retraining, qualification upgrades and the creation of new jobs in cooperation with governments, businesses and civil society.

A quarter of IKI projects are working on global energy transition

Between 2008 and 2022, the IKI funded 304 projects in the fields of renewable energies, energy efficiency and the phaseout of fossil fuels with a volume of EUR 1.38 billion. In the period between 2015 and 2021, figures provided by IKI projects show direct savings of 8.2 million tonnes of CO, equivalents. Support of a just global energy transition and decarbonisation of economic systems will remain as key focus areas of the IKI and its instruments in the future. With numerous partner organisations and partner governments, the funding programme is contributing to further accelerate the global energy transition and achieve the mitigation targets in the NDCs of the partner countries.

Scholarship Program Energy Transition for global climate protection

IKI-funding: EUR 2,686,170.00, duration: 08/2018 to 12/2023 >> IKI project page

Innovation Regions for a Just Energy Transition

IKI-funding: EUR 19,992,605.25, duration: 04/2022 to 07/2026 >> IKI project page

Clean, Affordable and Secure Energy for Southeast Asia (CASE)

IKI-funding: EUR 29,950,000.00, duration: 03/2020 to 02/2027 >> IKI project page

Further support for the expansion of renewable energies, energy efficiency and the phase-out of fossil fuels

The Strategy of the International Climate Initiative up to 2030 explicitly defines the topic of energy as a future priority in order to promote the further development of energy transition technologies, their financing and their socially just design, and ensure social acceptance of the transformation.

Increased cooperation with partner countries is a central factor towards tripling the capacity of renewable energies by 2030. A sustainable energy supply can be accomplished by means of a mix of political measures, funding of demonstration and pilot projects, capacity building, safe system integration of photovoltaic and wind turbine plants, grid expansion and the integration of these measures into national climate and energy plans.

The approaches in project work are individually tailored to the respective country and the agreed project objectives in order to contribute to the NDCs. In order to achieve a global change of course to the 1.5 degree Celsius path, the IKI continues to support ambition raising and the implementation in partner countries.



