

PROGRAMME FOR
**Global
Renewable Energy
and Energy Access
Transformation
(GREEAT)**



This document outlines a proposal for the initiation of a global programme to:

- **Provide access to sufficient energy to all by 2025**
- **Begin immediate transformation towards 100 per cent renewable energy**

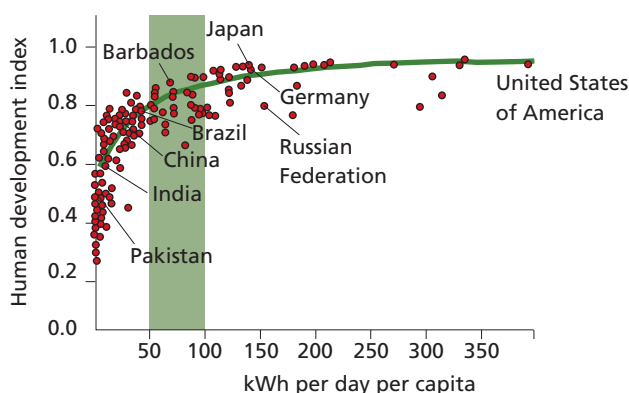
It addresses needs of transformation in both the North and the South.

THE CONTEXT

This proposal is **transformative** and bold — mirroring the severity of the challenges faced by the world.

- **CO₂ emissions from fossil fuels must end** within a few decades for the world to have a chance to keep global warming below 1.5°C or 2°C and **avoid catastrophic climate change**. This means a transition towards 100 per cent renewable energy (RE) must be initiated immediately and achieved in developed countries by 2030 and in developing countries by 2050 at the latest.

Figure 1: Correlation between HDI and primary energy use



- **Energy access for all by 2025** is an imperative and must be ambitious in scope — i.e., access to electricity 24/7 for **both basic and aspirational needs** and for local business and economic development, while stressing sufficiency and efficiency. Access to sufficient energy is a human right and must be **affordable** for poor people. Ultimately, per capita global energy use needs to **converge** at a level that avoids overuse and wastefulness while ensuring human well-being.

Many developing countries will need a **manifold increase** in per capita energy use. Plans and programmes for this must be drawn now. This requires a fundamental rethinking of the overall energy model.

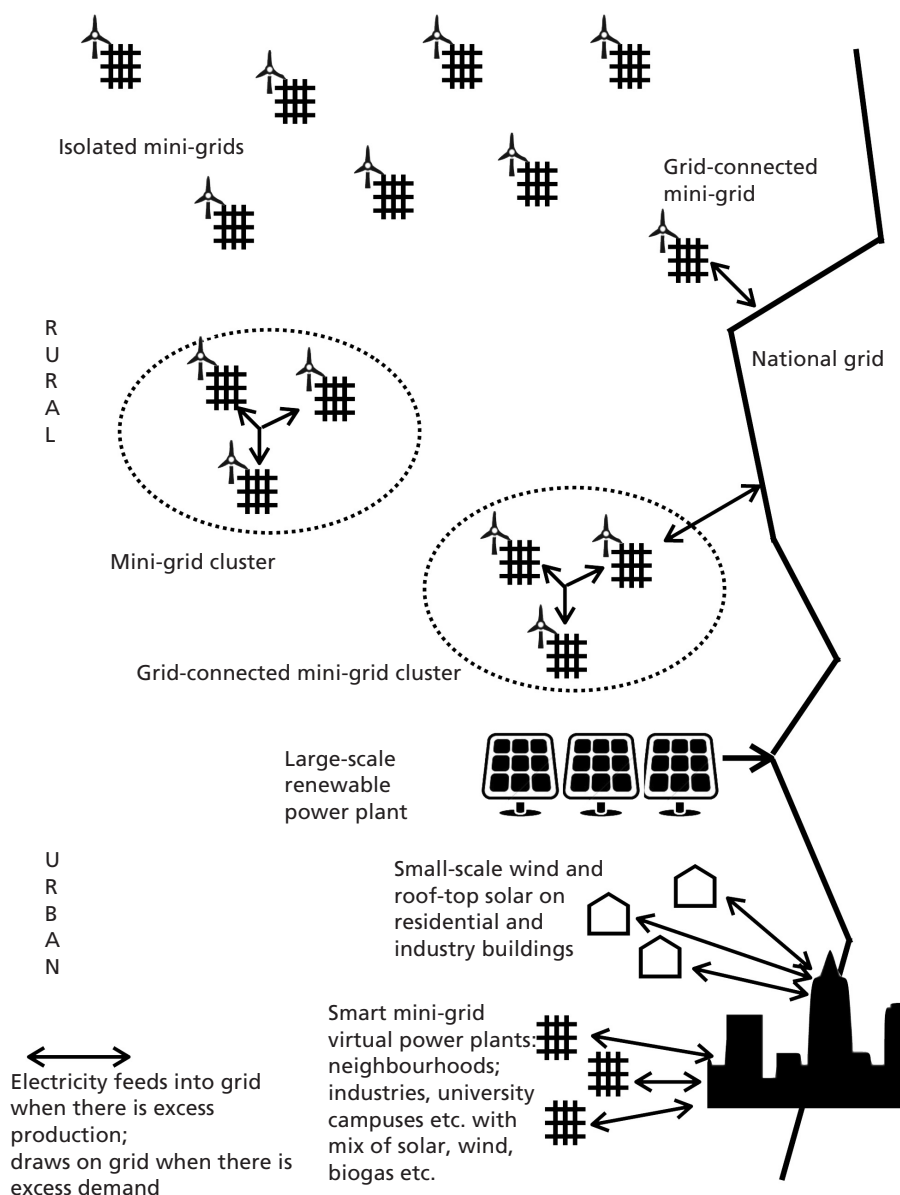
A 100 per cent renewable energy system that provides energy access to all requires planning for and initiating infrastructure and grid development that can **enable modern, distributed, people-centred and decentralized renewable energy power generation** from a large range of sources and developers. In the future energy system there will need to be millions of small and medium-sized entities that act as both producers and consumers of electricity, mixed with traditional large-scale generation, as appropriate to context of a particular country.

The programme targets broad-based **participation, community involvement** and the integration of energy efforts with **development planning** for local job creation, diversification of economies and thriving local development. With localization and diversification of electricity generation, many communities, business models, SMEs and domestic companies can emerge and provide electricity to each other through both connected mini-grids and national grids, thereby increasing resilience while creating opportunities for generation of income and economic development.

AN INTERNATIONAL SUPPORT MECHANISM FOR DEVELOPING COUNTRIES

The global programme must include an ambitious support mechanism that enables developing countries to undertake the transition to renewable energy.

Figure 2: Future energy systems: Distributed, decentralized renewable electricity



Needs

There is a need for **explicit, substantial support for electrification**, community-based power generation and off-grid development in order to meet energy access needs.

There is also a need for international financial support to facilitate **on-grid** renewable energy investments at different scales of generation, particularly through supporting **feed-in tariffs and other money-against-performance schemes that guarantee payment over decades**. These support mechanisms should be of such scope that countries can quickly redirect all their energy infrastructure development towards renewable energy.

Underlying all these efforts is the recognition that major efforts need to be directed to **capacity building** and exchange of experiences and lessons learned across communities, countries and continents. Capacity building efforts must also include dedicated efforts to develop **domestic manufacturing, maintenance and project development capacity** of RE technologies.

The programme recognizes that RE carry relatively high initial investment costs, but is then relatively cheap and not dependent on costs for fuel. International support to overcome this barrier through availability of **low-cost upfront finance** (in combination with secure payment guarantees that ensures a premium and reduced risk) are key features of the programme.

The fundamental **financial bottlenecks** for renewable energy transition that developing countries face must be addressed through international funding, in adherence with the climate convention and existing commitments.

Support streams

The programme features **three sets of complementary but distinct funding streams**:

- 1) specific support for **energy access/rural electrification** and off-grid development,
- 2) **general support** for renewable energy investment through supporting costs associated with feed-in tariffs/payment guarantees for production of renewable energy,
- 3) funding for **capacity building** and development of **domestic manufacturing capacity**.

The programme should be **voluntary** and based on **direct access** to finance by developing countries. It is **programmatic** and transformative, meaning developing countries receive international funding that is in turn channeled through national agencies to the particular local projects.

The support is to a large extent **output and results-based**, meaning funds are transferred after delivery of affordable, clean renewable energy.

In order to receive funds, countries agree with **principles and standards** mutually agreed upon at the international program level, which ensures public participation, environmental soundness and other **safeguards**.

Sources

Access to and provision of funds to the programme is pursued in accordance to principles of Common But Differentiated Responsibilities and Respective Capabilities (CBDR-RC) and countries' fair shares.

Global Climate Fund (GCF) should play a decisive role both in the short time perspective (as developing countries approach GCF as forerunners with requests that mirror and illustrate this programme) and on longer term by enabling all developing countries to fund their national efforts accordingly. This means massive scaling up of capitalization of the GCF.

In addition to GCF, **other provisions** of public funds to drive this programme should also be explored and pursued (such as international taxations, use of IMF Special Drawing Rights etc.).

Through the public finance support mechanisms vastly larger sums of investments, both public and private, will be leveraged for renewable energy.

GLOBAL PARTNERSHIP TO DRIVE TRANSFORMATION IN BOTH THE NORTH AND THE SOUTH

In addition to the specific support mechanism for developing countries, the global programme should include a **Global Partnership** that also addresses the needs of energy transformation of developed countries (through scrutiny of national plans and policies, exchange of experiences, multi-stakeholder engagement, etc.), formulates principles and quality criteria and provides a basis for trust-building and collaboration.

Transformation in developed countries

A transition to 100 per cent renewable energy must take place simultaneously in **developed and developing countries**. **Developed countries**, due to their high per capita emissions, historical responsibility and higher technological and financial capacity to act, must do their utmost to reduce immediately. To still have a limited chance of avoiding a catastrophic warming of more than 1.5°C or 2°C, developed countries need to achieve 100 per cent RE by around **2030**.

The transition in developed countries must mean a **decrease in absolute energy use** (ultimately towards global convergence substantially below current levels of energy use in rich countries), while preserving or increasing the level of well-being, particularly among the less well-off. While much of the infrastructure is already built in developed countries, obsolete and dirty fossil fuel-based generation must be **phased out** and **replaced** by new, modern, distributed renewable energy systems, including upgrading to smart grids.

The transformation that is required is momentous and requires international cooperation and mutual support on an unprecedented scale to find the best solutions. The GREEAT Partnership must include spaces for **extensive interaction** where governments, civil society, communities, companies, academia and international organizations can engage and set the direction, including the formulation of key, overriding principles and quality targets for the future RE systems.

Policy tools such as **feed-in tariffs** should be carefully considered by countries that have not yet taken such a route. If choosing other policy routes, they should be able to show how these will ensure ambitions that exceed those of the countries that are currently in the forefront among developed countries—recognizing that what these have achieved **so far** is only a **small fraction** of what needs to be done within the next 10–15 years.

Developed countries must discuss their current models and plans and expose themselves to fruitful **scrutiny** by others in order to foster a **race to the top**.

Financing for this transformation in developed countries must come from **within** these countries and cannot crowd out support for developing countries.

However, through the massive expansion of Renewable Energy demand spurred by the support mechanism for developing countries under the GREEAT programme, **costs** for renewable energy will be further **pushed down**, thus making the **transition** in developed countries **cheaper**.

Principles and quality criteria

A number of key principles and quality criteria must underscore every aspect of the GREEAT programme. A few key principles should be agreed to at the **global partnership level**, while detailed applications of these principles must be determined and elaborated at the **national level** through multi-stakeholder engagement.

- Principles that ensure participatory choices of renewable energy technologies that are locally, **environmentally, socially, culturally, and economically sound** are essential.
- The programme must keep **equity** at its very core to ensure that energy access and the well-being of poor people and communities are prioritized. Likewise, at the national level, the operationalization of **CBDR-RC** means that countries should provide and receive financial and technological support in relation to their **fair shares**.
- It is imperative that the global partnership highlights the need for a **just transition**, and actively engages and involves trade unions and other groups that may be negatively affected during the transition phase.
- As the climate crisis demands maximum, early efforts by all, the international support to developing countries under the program should **not** be eligible for **off-setting** domestic measures in developed countries. Rich countries must do everything possible at home, and *on top of these further support developing countries* (who also need to do their fair shares).

Ways forward

The time for launching a Global Renewable Energy Access and Transformation programme is now. Progressive countries, civil society and other forces for change must put these ideas on top of the policy agenda and build strong political support towards COP21 in Paris.

Developing countries are already taking a lead. At the domestic level, countries such as Sri Lanka are already formulating plans and policies for a 100 per cent renewable energy future. India is planning to install 175 giga-watt of renewable energy by 2022. At the international policy level, the Africa Group is already calling for the establishment of a global programme for renewable energy in line with these ideas.

In concrete terms we call for:

- As many countries as possible to support current efforts and submit calls for a GREEAT programme in line with this document in the lead-up to COP21.
- Decision by COP21 to establish a GREEAT programme.
- Acceleration of the work by the technical expert meetings (TEMs) and technical examination process (TEP) under Workstream 2, the technology and capacity building mechanisms as well as the finance mechanisms under UNFCCC towards the implementation of a GREEAT programme.

- Prioritization by GCF to fund country and regional requests to set up national renewable energy support mechanisms in line with this proposal, as positive demonstration and pilot efforts towards a global programme.

A Global Renewable Energy and Energy Access Transformation programme has the potential to set a sector-wide example of best practice and collaborative efforts to tackle the common threat of climate change. Beyond the huge transformational impact it would have within the energy sector, it also has the potential to rebuild trust within the international negotiating process overall. Only through real commitments and actual transfers of substantial public funds, paired with mutual engagement on substantive issues, can the current impasse be overcome.

The ideas presented in this document stem from the publication 'A Global Renewable Energy Support Programme' published by Centre for Science and Environment and What Next for COP20 in Lima, and were further elaborated at an international multi-stakeholder meeting in Delhi in March 2015 as part of an on-going and broadening international mobilisation process.

Documentation and further information can be accessed at www.whatnext.org and www.cseindia.org.

