Viet Nam is one of the most rapidly growing economies in Southeast Asia. This economic growth is expected to raise electricity demand by more than 10% per year through 2020. This poses a major challenge to the country’s energy security; in addition, with its extensive coastline Viet Nam has been identified as one of the countries that will be most impacted by climate change. As stated in its Green Growth Strategy, Viet Nam aims to significantly reduce greenhouse gas (GHG) emissions. It is therefore critical for Viet Nam to ensure that the country’s enormous economic potential is paired with a strong low-carbon development strategy and implementation efforts.

In recent years, the Government of Viet Nam has attempted to enact various measures to respond to these challenges. The Viet Nam Green Growth strategy enacted in 2012 sets the target for reducing GHG emissions reductions from the energy sector between 10% and 20% for the period between 2011 and 2020 compared with the business-as-usual scenario, and between 20% and 30% by 2030. To reduce the country’s dependency on fossil fuel production, the Government approved the National Power Development Plan (PDP VII revised, March 2016), aiming to substantially increase energy efficiency and the contribution of renewable energy to the overall energy mix. To finance these plans the Government is looking to a variety of funding sources, including the national budget, the private sector and international financing sources such as the Green Climate Fund.

The importance of agriculture to Viet Nam’s economy offers substantial potential for developing power production from bioenergy. In the revised PDP VII, the Government has set targets for the production of electricity from biomass, which it aims to increase from 0.16% of total energy production in 2016 to 1% by 2020 and 2.1% by 2030. Research in 2014 estimated that Viet Nam’s biomass potential totals approximately 20 million tons of wood energy and more than 50 million tons of agriculture residues (mainly rice husk, straw and bagasse). Effectively utilising this potential for energy production will help to achieve the national biomass power production targets, time reduce the country’s GHG emissions and contribute to sustainable rural development.

**Planned Installed Capacity**

Source: Revised PDP VII (calculated based on projected renewable electricity production as a share of total energy production in 2020/2030)

**OBJECTIVE**

The Climate Finance Readiness Programme (CF Ready) is supporting the Government of Viet Nam in developing transformative, paradigm-shifting approaches to implementing its low-carbon development path and linking those approaches to national and international climate finance sources. It is commissioned by the German Federal Ministry for Economic Cooperation and Development (BMZ) and co-funded by the United States Agency for International Development (USAID) and the Ministry of the Environment of the Czech Republic.
OBJECTIVE

The Renewable Energy and Energy Efficiency project within GIZ’s Energy Support Programme, in close cooperation with key stakeholders, is implementing the program. The main focus is to achieve the biomass development targets set out in the revised PDP VII, facilitating private sector investments in grid-connected biomass power and supporting access to domestic and international climate financing. Positive spill-over effects such as easier market access, shared learning experience and better understanding of investment risks are expected in other energy sub-sectors, as well in the energy policy framework.

APPROACH

THE ACTIVITIES OF CF READY IN VIET NAM FOCUS ON THE FOLLOWING THREE ACTION AREAS:

Action Area 1: Legal and regulatory framework
The GIZ and USAID project has contributed to improvement of the regulatory framework and enabling conditions by supporting preparation of the Provincial Biomass Energy Development Plan to 2020, with further involvement up to 2030, in the An Giang and Gia Lai provinces. The Plan gives a full picture of biomass energy potential in these provinces and proposed locations, types of biomass materials, development timeline, and supporting mechanisms aimed at facilitating biomass energy development in the provinces by, for example, reducing administrative obstacles such as licensing and permit requirements. Furthermore, working with the local authorities, the project developed planning methodologies including assessment of resource potential, grid connection, environmental and social impacts, and the preliminary calculation of theoretical and technical potentials. The Plan also supports development of a transformative financing mechanism for bioenergy, creating access to international climate finance and facilitating private sector investment.

Action Area 2: Capacity development
The deployment of biomass energy requires adequate capacity among key stakeholders such as policy makers, factory operators, investors, banks and consultancy companies. Capacity building activities undertaken by GIZ included exchanges between local policy makers and professionals from other countries, assessments of needs, and trainings for sugar mills and banks. Coupled with an improved enabling environment, these activities have enhanced the prospects for effective development and deployment of new biomass energy projects in Viet Nam.

Action Area 3: Technology cooperation
The project seeks to support mobilization of private sector investment in biomass. The activities include support to five sugar mills with pre-feasibility studies on combined heat and power (CHP) plants in Thanh Hoa, Nghe An, Dak Lak and Hau Giang provinces, and match-making between different stakeholders from commercial and public finance with industry representatives.

RESULTS

Through implementation of the three action areas, the project has achieved the following results:

- Contributions to mobilization of up to USD 121.75 million in new private sector investments in climate-friendly technologies in the sugar industry by 2025, as well as creation of up to 12,000 jobs in the supply chain, contributing to rural development.
- Mitigation of GHG emissions in the electricity sector through the use of biomass from the sugar industry, leading to a reduction of more than 10 million tons carbon dioxide equivalent by 2030.
- Capacity building for nearly 200 women and men in Viet Nam, totaling more than 16,000 hours of training.