



DHPC is as follows;

Technical	Non-Technical	Security	ESP	Total
20	34	17	17	86

## FINANCE

The project was approved for implementation at an estimated cost of US\$ 201.50 million, corresponding to Nu. 8.16 billion at 60:40 debt equity ratio at price level of 2008. This is the first Hydropower Project in the Kingdom financed through Public -Private Partnership.

Items	Financing (Million USD)	Shareholding Ratio (%)
Equity	80	100
DGPC	47	59
TPCL	21	26
NPPF	12	15
Debt	160.5	
ADB (OCR)	51	
RZB	55.5	
NPPF	15	
ADB (ADF)	39	
<b>Total Financing</b>	<b>240.5</b>	

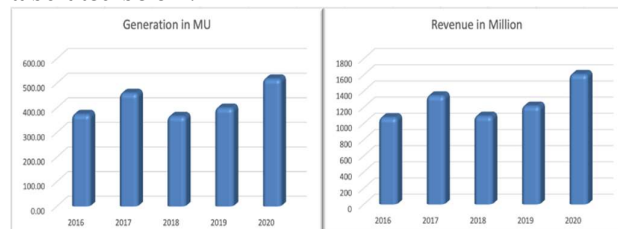
The Austrian Development Agency, Republic of Austria has provided Technical Assistance for the Capacity Development to Bhutanese Department of Hydropower and Power Systems, RGOB. The main components of the civil works of the project was contracted to Hindustan Construction Company and the supply & installation of Electro-Mechanical Equipments to Austrian Hydro Consortium Dagachhu (Joint venture of Alstom & Andritz, Austria).

The Unit I & II were commissioned and commercial flow of power from Dagachhu Hydropower Project started from February 21, 2015 and March 15, 2015 respectively.

All the power from the project including the Royalty Energy is being evacuated to India through a long-term Power Purchase Agreement with Tata Power Trading Company Limited, India.

## ELECTRICITY GENERATION AND REVENUE

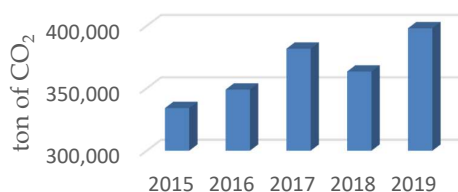
The energy generation and the revenue earned from the sale of electricity for the year 2015, 2016 & 2017 is as tabulated below:



## CLEAN DEVELOPMENT MECHANISM

Dagachhu Project (Registration No. 2746) was registered as a CDM Project on February 26, 2010. The project is estimated to generate 515 GWh of electricity annually that will provide 500,000 Certified Emission Reduction (CER) certificates for trading with a crediting period from 2014 to 2021 (renewable). This is the first Cross-Border Clean Development Mechanism Project. The yearly CER generation is as tabulated;

CER Generation



## LAND REPLACEMENT AND ECONOMIC BENEFITS

30.69 acres of private land has been acquired for the Project from 25 families and one community. All families are provided with substitute land. There was no issue of resettlement. Since most of the project structures are underground, there is not much social and environmental impact.

The construction of 21 km of project road has improved access to the people of Kana, Khevisa and Goshi

Gewogs. The implementation of the project has provided commercial opportunities to the communities of the district.

The local communities have received the following monetary benefited from the project as of date from the construction activities of the project including the O&M of the Power Plant.

Area of Income	Number of Beneficiaries	Amount (Nu. million)
House & Land Rental	34	16.614
Works	32	47.511
Employment	258	31.885
<b>Total</b>	<b>324</b>	<b>96.010</b>

## ENVIRONMENT IMPACTS

The Environment Unit of DHPC ensures environment management as per the Environment Management Plan. The mandates are complied with constant monitoring by the authorities. The environmental initiatives are not just confined to the project sites, programs like awareness campaigns are conducted to educate the communities in and around the project.

To compensate for the trees felled during the construction phase and to preserve the forest cover, DHPC has planted more than 26,000 ornamental trees in the project vicinity.

The Quality of Air and water are being monitored quarterly in collaboration with National Environment Commission. The sites degraded by the project activities have been restored in consultation with the relevant Authorities.

