**Key Activities**

Establishment of Hydrogen Energy Laboratory-Project, Chattogram (HELC) is an initiative for making sustainable energy future of Bangladesh by implementing Hydrogen Economy where Hydrogen will be dominating fuel for all sectors. The key activities of HELC are as follows:

* **Research activities**
* Hydrogen production through biomass gasification
* Hydrogen production from photo-catalytic water splitting
* Hydrogen Storage in Solid state materials
* Hydrogen Fuel Cell (Fuel cell components development & fuel cell Fabrication)
* Catalysis (Fuel Cell catalyst, Hydrogen Production process catalyst, Photo catalyst etc)
* Reaction mechanism study (Experimental & Theoretical [Density functional theory] method)
* **Research collaboration**
* Industries, Universities and research persons
* **Student supervision**
* Thesis supervision, research and higher study guideline
* **Analytical service**

Different parameters of sand, stone, coarse aggregate, brick, cement, ceramics, polymer, water, metal alloys, and oil samples are tested.