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## About

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HomeAbout The **Centre for Energy Research (CER)** was established in September, 2010 in **United International University** under the **Department of EEE**. The aim of the CER is to enhance research in the fields of renewable and sustainable energy, its utilization and efficient management, and policy formulation through research and development. A state of art research laboratory is being developed under CER to carry out test and research in the field of renewable energy. Centre for Energy Research (CER) of United International University has become one of the leading Renewable Energy research and consultancy centres in Bangladesh. So far, it has successfully conducted about **100** projects since its establishment in September 2010 on Renewable Energy and the Environment. Among this number, it has successfully completed about 50% projects and rests are ongoing. Currently, it is working in design and development of several solar diesel hybrid mini-grid for rural electrification, grid connected PV power plant and environmental projects. CER is also one of the testing institutions of Solar Home System (SHS) equipment in Bangladesh for certification of SHS equipment according to Bangladesh SHS standard. As of now, it has tested over 250 equipments (LED lamp, Charge controller, DC-DC converter, Battery) in its lab.

### Research Achievements:

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1. **bestperformances in terms of efficiency for CIGS solar cells at thetime.** [ZSW, Germany, 2006].
2. **The Project was one of the three finalist projects for IEEE-IFEC 2009 in Chicago, USA**[Supervisor]
3. **InterSolarAward 2016** – in the category of – **Outstanding Solar Projects** – in Munich, Germany. The project also won the **UN Momentum for Change 2016 Award**[Team Leader and Principal Investigator of research project funded by IDCOL]
4. Development of Automatic solar PV irrigation system measuring the moisture content of soil and water level with prepayment and remote control and monitoring system (World Bank funded research project).[Team Leader and Principal Investigator]. The project won the – **Inter-UniversityInnovation Project Award** – in – **National Power & Energy Week 2016** – organized by Ministry of Power, Energy and Mineral Resources, Bangladesh.

## Winning the –UN Momentum for Change, 2016– Award at UNFCCC COP 22 @ Marakech, Morocco (November, 2016).

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Winning the –Inter University Innovative Project Competition– organized by Ministry of Power, Energy and Mineral Resources, Bangladesh | Winning –InterSolar Award 2016– in Munich, Germany (June, 2016)

### Research Partners:

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SI No	Name of the Institution/Organization	Logo/Website
1	University of California at Berkeley, USA	
2	Virginia Polytechnic Institute and State University, USA	
3	Solar Energy Research Institute of Singapore, Singapore	
4	Technical University of Berlin, Germany	
5	University of Oldenburg, Germany	
6	University of Ulm, Germany	
7	University of Oxford, UK	
8		
### Notable projects of CER:		
(1)	Project: Development of Solar-Diesel Hybrid Minigrids for off grid area electrificationFinancier: Infrastructure Development Company Limited (IDCOL)Major project feature: Feasibility study, Design, supervision of construction, testing and commissioning of solar hybrid mini-grids	
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SN.	Capacity (kWp)	Location
i. 1.	141	Paratoli Union, Raipura, Narshingdi
ii. 2.	141	Gorgori union, Bhaga, Rajshahi
iii.	100	Dhurung Bazar, Kutubdia, Coxâ€™s Bazar
iv. 3.	158	Dakdohora Narayanpur, Nagashwari Kurigram.
v. 4.	177	Monpura, Bhola
vi. 5.	149	Char Asaridaha, Godagari, Rajshahi.

vii. 6.	210	Chilmari-Char, Daulatpur, Kushtia
viii.	242	Baghutia, Doulotdia, Manikgonj
ix.	130	RupsharChor, Mesra Union, Sirajgang,
x. 7.	247	Char Sholmari, Rowmari, Kurigram.
xi. 8.	175	Monnia chor, Belghasa, Islampur, Jamalpur
xii.	162	North Channel, Kotoali thana, Faridpur.
xiii. 0.	200	Nijhum Dwip, Hatiya, Noakhali
xiv.	218	GasChapri,Bordhul, Belchuchi, Sirajgang
xv.	156	Poshchim Shalipur, Char Bhadrashan, Faridpur.
xvi. 2.	240	PurbaShalipur, Char Bhadrashan, Faridpur.
xvii.	218	Kodalkathi, Char Rajibpur, Rajibpur, Kurigram
xviii.	518	Charchenga, Hatiya, Noakhali
xix.	250	Larngutia, Mehendiganj, Barisal
xx.	250	Nischintapur Union, Kazipur Upazilla, Sirajganj
xxi.	210	Lesragonj, Horirampur, Manikgonj
xxii.	250	JoyBangla & Noapara bazar, Naria, Shariatpur
xxiii.	250	Kachikat, Zinking bazar, Vedorgong, Shariatpur
xxiv.	250	Char-Atra bazar of

xxiv.	250	Naria, Shariatpur
xxv.	250	South Khatiamari, Fazlupur, Fulchari, Gaibandha
xxvi.	250	BoroChar, Motlob (North), chandpur
	xxvii.	250
xxviii.	250	CharPaka, Shibganj, ChapaiNawabganj,
xxix.	250	Saint Martin, Teknaf, Coxâ€™s Bazar
xxx.	250	Tengrakandi, Phulchori, Gaibandha
xxxi.	250	KunderChar, Jazira, Shariatpur
xxxii.	320	Urir Char, Sandwip, Chittagong
ShouroBangla 141kWp Solar Mini-grid at Paratali island of Narshingdi District		
Hydron 141kWp Solar Mini-grid in Gorgori Island of Rajshahi District		
Environmental and General Projects		
Sl.	Name of Project	Client
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1.	Bangladesh Energy and Emission Modeling (BD 2050)	Ministry of Power Energy and Mineral Resources of GoB Cardiff University, UK
2.	Bangladesh Delta Plan (BDP2100)	Ministry of Planning of GoB and Netherlands
Contract signing ceremony with IDCOL for DC mini-grid laboratory		
Recently, Centre for Energy Research (CER) of United International University (UIU) has been awarded by a research grant of <b>1 crore and 10 lac taka</b> to establish a solar DC mini-grid laboratory from World Bank through Infrastructure Development Company Limited (IDCOL). This solar DC mini-grid laboratory will be able to contribute in the development of solar PV technology. Researchers of CER consider that DC mini-grid can replace the conventional solar AC mini-grid which will not only reduce the project cost also reduce the dependency on foreign technology and imported equipment significantly. In addition, this will also create opportunity to introduce local technology and equipment		

<p>opportunity to introduce local technology and equipment.</p> <p>However, apart from its predominant purpose, the laboratory can also play a significant role for researching in different technical aspects of conventional AC mini-grid.</p>		
<p>On 20 November a contract has been signed between IDCOL and CER in this regard. The Chief Executive Officer of IDCOL Mr. Mahmud Malik and the Director of CER Mr. Shahriar Ahmed Chowdhury have signed for their organizations. The signing ceremony was witnessed by Honorable Advisor of Ministry of Power Energy and Mineral Resources Dr. Tawfiq-e-Elahi Chowdhury B.B. and the Vice Chancellor of UIU Prof. M. Rezwan Khan along with some other high official of Power Division and IDCOL.</p>		
Architectural design of DC mini-grid laboratory		
##### Contact info		
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