

6<sup>th</sup> Best Practices Training and International Workshop on

# Agri PV Plants, RE Grid Integration and Green Hydrogen

Date: 15<sup>th</sup> – 17<sup>th</sup> March 2023

Venue: Hotel Fairfield by Marriott, Jodhpur



Organized by



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## INTRODUCTION

The Government of India is focusing on meeting the increasing energy demand through massive scaling up of its electricity generation from renewable energy sources. The Government of India has set a target of 175 GW of renewable capacity by the year 2022 and aims to achieve 500 GW by 2030.

Agri-PV or agrivoltaics can resolve land-use conflicts between energy and agriculture production, by combining both on the same site and increasing land productivity. The additional benefits include increased decentralized and local electricity production enabling sustainable production/supply chain, the reduction of peak energy demand and a reduction of CO<sub>2</sub> and hazardous local emissions from conventional power plants. Farmers benefit from an increase in income while diversifying their risk, cost savings through self-consumption of electricity, improved agricultural practices and lower requirement of water for irrigation.

The study tour consists of a visit to pilot projects in the Agri PV plant in CAZRI Jodhpur, a 105 kWp, one-acre Agri PV system comprises 35 kWp each block of panels plus a rainwater harvesting tank.

The Prime Minister of India announced the launch of the National Hydrogen Mission (NHM) while commemorating 75 years of Independence on 15 August 2021. The mission aims to significantly reduce carbon emissions and increase the use of renewable sources of energy and envisages making India a global hub for green hydrogen production and export. Green hydrogen is produced via the electrolysis of water; the electricity used for the electrolysis must derive from renewable sources. Irrespective of the electrolysis technology used, the production of hydrogen is zero-carbon since all the electricity used derives from renewable sources and is thus zero-carbon.

## ANNOUNCEMENT

The Indo-German Energy Forum (IGEF), and the Central Board of Irrigation and Power (CBIP) have taken a joint initiative of organizing the 6th Best Practices Training and International Workshop on Agri PV Plants, RE Grid Integration and Green Hydrogen from 15 -17 March 2023 (Wednesday, Thursday and Friday) at Jodhpur. The Best Practices Training and International Workshop will be beneficial for the participants to enhance their knowledge on Agri PV Plant, RE Grid Integration and Green Hydrogen - benefits and challenges.

The program is expected to be attended by participants drawn from State GENCOS, DISCOMS, State Transmission Utilities (STUs), State and Regional Load Dispatch Centers, NHPC, NTPC, POWERGRID, Grid Controller of India Ltd., State RE Departments, State Electricity Regulators, Agriculture Departments, Water organizations other relevant stakeholders as well as from neighboring countries like Bangladesh, Nepal and Bhutan etc.

## OBJECTIVES OF THE STUDY TOUR

The objectives of the Best Practices Training Program are to:

- Provide the DISCOMS/Developers/STUs and other stakeholders and opportunity to share their experiences, and success stories and learn from the experiences of others.
- Discuss the important issues faced by the EPC contractors of Agri PV management and agricultural products and services, as well as yields and productivity.
- Discuss the regulatory and financial mechanisms required to provide the impetus of Agri-PV Plant, RE Grid Integration and Green Hydrogen.
- Learn the latest GH<sub>2</sub> and GH<sub>3</sub> technologies and processes and help in the development of strategic plans at the state level or company level and contribute to the net Zero blueprints.
- Create a network of professionals working in the “Agri PV and GH<sub>2</sub> and GH<sub>3</sub>” domain.

## PROGRAMME SCHEDULE

<b>Date: Wednesday 15<sup>th</sup> March 2023</b>	
<b>Venue: Jodhpur at Fairfield by Marriott Hotel, Jodhpur, Opposite New High Court, Near Shatabdi Circle, Vijay Raje Nagar, Jodhpur-342 013, Rajasthan, Phone : 0291 7112222 /9001514543</b>	
Time	Description
12:00 hrs. onwards	Reporting of participants at the hotel
17.30 – 19.00 hrs.	Registration and introduction with participants and briefing about program
19.00 onwards	Networking Dinner

<b>Date: Thursday 16<sup>th</sup> March 2023</b>	
<b>Venue: Jodhpur at Fairfield by Marriott Hotel, Jodhpur, Opposite New High Court, Near Shatabdi Circle, Vijay Raje Nagar, Jodhpur-342 013, Rajasthan, Phone : 0291 7112222 /9001514543</b>	
08:00 -10:00 hrs.	Breakfast at Hotel
10.00-13.00 hrs.	<b>Technical visit 105 KwP Agri PV Plant and RE Grid Integration in the Central Arid Zone Research Institute (CAZRI), Jodhpur</b>
13.00 – 14.00 hrs.	Lunch at Hotel
1430 – 20.00 hrs.	Historical City Tour
20:00 – 22.00 hrs.	Networking Dinner at Hotel
<b>Date: Wednesday 17<sup>th</sup> March 2023</b>	
<b>Venue: Jodhpur at Fairfield by Marriott Hotel, Jodhpur, Opposite New High Court, Near Shatabdi Circle, Vijay Raje Nagar, Jodhpur-342 013, Rajasthan, Phone : 0291 7112222 /9001514543</b>	
08.00 – 10.00 hrs.	Breakfast at hotel
10.00 -11.00 hrs.	International Workshop on <b>Agri PV Plant and RE Grid Integration – Policies and Challenges</b>
11.00 -11.30 hrs.	Tea Break
11.30 – 13.00 hrs.	International Workshop on <b>Agri PV Plant and RE Grid Integration – Policies and Challenges</b>
13.00 – 14.30 hrs.	<b>Net Working Lunch</b>
14.30 – 15.30 hrs.	<b>International Workshop on Green Hydrogen – Policies and Challenges</b>
15.30 -16.00 hrs.	Tea Break
16.00 – 17.00 hrs.	<b>International Workshop on Green Hydrogen – Policies and Challenges</b>
17.00 – 17.30 hrs.	<b>Concluding Session</b>
20:00 – 22.00 hrs.	Networking Dinner
<b>Date: Saturday 18<sup>th</sup> March 2023</b>	
<b>Venue: Jodhpur at Fairfield by Marriott Hotel, Jodhpur, Opposite New High Court, Near Shatabdi Circle, Vijay Raje Nagar, Jodhpur-342 013, Rajasthan, Phone : 0291 7112222 /9001514543</b>	
08:00 -09:00 hrs.	Breakfast at Hotel
12.00 hrs.	Check out from Hotel

#### Note:

- Check-in time is at 12 Noon onwards on Wednesday (15 March 2023) at Jodhpur Hotel and Check –out time is at 12 Noon on Saturday (18 March 2023) from Jodhpur Hotel.
- Seats are very limited and on a first come first served basis. All interested participants are requested to confirm well in advance inclusive payments.
- If any participants are interested to come with their spouse kindly intimate us well in advance.
- If any candidate like to stay more days (before 15 March or after 18 March 2023 kindly intimate us and book the venue hotel well in advance at bulk and negotiated rates.
- Flights are available from Delhi, Bangalore, Mumbai, Kolkata and Hyderabad to Jodhpur and back and it is also well connected by train, car, share taxi and bus.

#### THE DELEGATION PACKAGE INCLUDES

- Hotel Accommodation on a single occupancy basis - 4 star.
- Briefing of delegation before travel.
- Boarding and lodging for only three nights (15<sup>th</sup> March 2023 afternoon till – 18<sup>th</sup> March 2023 forenoon).
- Official tour for all transfers mentioned in the agenda.
- Professional guided tour facilities.
- Technical field visits to CAZRI Plant and some tourist places at Jodhpur.
- All course materials and background information.
- Accompanied by professional coordinators and technical experts.



## THE DELEGATION PACKAGE DOES NOT INCLUDE

- Transfers to and from Jodhpur Airport to Jodhpur hotel– on the first and last day 15<sup>th</sup> and 18<sup>th</sup> March 2023.
- Flights
- Cost for additional nights of hotel stay before 15<sup>th</sup> March and after 18<sup>th</sup> March 2023.
- Other expenses (e.g. additional meals, private consumption at the hotel, phone calls, laundry service, personal shopping, others etc.)

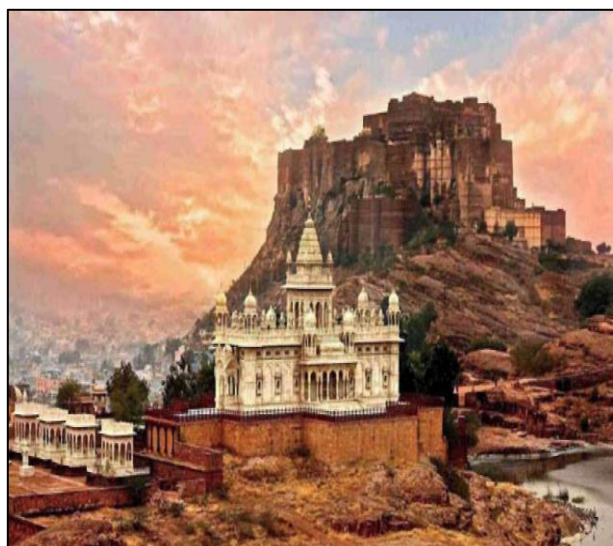
## SPONSORSHIP OPPORTUNITIES

The International Workshop on Agri PV Plants, RE Grid Integration and Green Hydrogen at Jodhpur provides an effective opportunity for sponsoring companies to promote their products/services to a focused audience, besides networking with engineers of utility, manufacturers and academic institutions during Tea/Coffee, Lunch and Dinner intervals. Sponsors assured of full visibility with printing of their names on Proceedings, Main Workshop banner and other publicity material related to International Workshop and will have the privilege of distribution of their product's pamphlets/catalogues during the event. Sponsors will also have the privilege of sending delegates exempted from payment of registration fee as indicated hereunder:

Category of Sponsorship	Fee in Rs.	Free Delegates in the workshop	Free advertisement in CBIP W&E intl. Journal on April 2023 issue or workshop proceeding
Gold	2,00,000	2	1 page
Silver	1,00,000	1	Half page

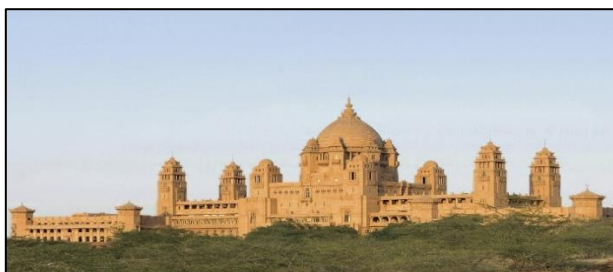
For further details, please contact the Workshop Secretariat.

## IMPORTANT TOURIST PLACES IN JODHPUR



**Mehrangarh Fort**

Mehrangarh Fort located in Jodhpur, Rajasthan, is one of the largest forts in India. Built in around 1459 by Rao Jodha, the fort is situated 410 feet (125 m) above the city and is enclosed by imposing thick walls. Inside its boundaries there are several palaces known for their intricate carvings and expansive courtyards. A winding road leads to and from the city below. The imprints of the impact of cannonballs fired by attacking armies of Jaipur can still be seen on the second gate. To the left of the fort is the Chhatra of Kirat Singh Soda, a soldier who fell on the spot defending Mehrangarh. There are seven gates, which include Jayapol (meaning 'victory gate'), built by Maharaja Man Singh to commemorate his victories over Jaipur and Bikaner armies. There is also a Fattehpol (also meaning 'victory gate'), which commemorates Maharaja Ajit Singhji victory over Mughals. The museum in the Mehrangarh fort is one of the well-stocked museums in Rajasthan. In one section of the fort museum, there is a selection of old royal palanquins, including the elaborate domed gilt Mahadol palanquin which was won in a battle from the Governor of Gujarat in 1730. The museum exhibits the heritage of the Rathores in arms, costumes, paintings and decorated period.



**Umaid Bhawan Palace**

Built between 1928 and 1943, Umaid Bhawan Palace is a magnificent piece of Rajasthan's heritage, and a symbol of new Jodhpur. Home of the erstwhile Jodhpur royal family and currently the world's sixth-largest private residence, the palace has one thing in common with the iconic Taj Mahal at Agra—the palm court marble used in its construction. Perched on Chittar Hill, the highest point in Jodhpur, Umaid Bhawan Palace inspires with exotic views of the historical Blue City, vast sand dunes, and intimidating Mehrangarh Fort.

# REGISTRATION FORM

## 6<sup>th</sup> Best Practices Training and International Workshop on Agri PV Plants, RE Grid Integration and Green Hydrogen

**Date: 15-17 March 2023 (Wednesday, Thursday and Friday)**

**Venue: Hotel Fairfield by Marriott, Jodhpur, Opposite New High Court, Near Shatabdi Circle  
Vijay Raje Nagar, Jodhpur, 342 013, Rajasthan, Phone: 0291 7112222 /9001514543**

We are proud to offer a complete special delegation package for your participation in the technical study tour to Jodhpur, Rajasthan. Please complete the following registration form to guarantee participation.

Name	
Designation	
Organization	
Address	
Telephone	
Mobile	
E-mail	
Website	
Date of Birth	
Company	Public Ltd.      Govt      Other
<b>Working area of organization</b>	
<b>What are your expectations and special interest in this study tour?</b>	
<b>Package option</b>	
<b>DELEGATION PACKAGE INR 30,000 /- PLUS 18% TAX (GST) FOR INDIAN DELEGATES AND 450 DOLLARS FOR FOREIGN DELEGATES.</b>	
<b>Accompanying Person Charges @ Rs. 12,000 /- Plus 18% Tax (GST) In Double Occupancy Basis and should be Wife/Son/Daughter Normally Residing with the participants.</b>	
<b>Payment Options</b>	
Cheque / DD in favour of: "Central Board of Irrigation and Power" New Delhi Sent to : Central Board of Irrigation and Power, Plot No-4, Malcha Marg, Chanakyapuri, New Delhi 110 021	
<b>or Via Bank Transfer to:</b>	
Account holder name	Central Board of Irrigation and Power
Bank Name	HDFC Bank
Branch & Address	209-214, Kailash Building, 26 K.G. Marg, New Delhi -110001
Saving Bank Account No	00031110004411
Branch/RTG/NEFT/IFSC	HDFC 0000003
MICR Code	110240001
Swift Code	HDFCINBBDEL
<b>GST No.</b>	<b>07AAAJC0237F1ZU</b>
<b>Cancellation Policy:</b> Understand that in case I cancel my participation after, 28 <sup>th</sup> February 2023, the entire delegate fees will be non-refundable.	

### STUDY TOUR SECRETARIAT

**Shri A.K. Dinkar, Secretary**

**Shri K.K. Singh, Director**

Central Board of Irrigation and Power, Malcha Marg, Chanakyapuri, New Delhi -110021  
Phone: 011- 2611 5984/ 2611 1294/ 2611 6567 Ext.161 Fax: 011- 2611 6347

**Contact Person: Shri B. Dasgupta**, M: 9911699689, E-mail: [dasgupta@cbip.org](mailto:dasgupta@cbip.org)

**Smt. Madhu Dhingra**, M: 9953966032, E-mail: [madhu@cbip.org](mailto:madhu@cbip.org)

**Disclaimer:** By filling out this registration form, you consent to its storage and use by IGEF and CBIP for further communication related to the study tour and other important developments in the Indo-German Energy scenario.