



# 16<sup>th</sup> Executive Committee (ExCo16) Meeting

6 July 2023

Green Powered Future Mission Team



- 13:00–13:05 **Welcome and introduction**
- 13:05–13:30 **National Pilots Report: presentation, discussion and approval**
- Latest revisions and inputs
  - Open discussion and approval
- 13:30–13:40 **GPFM participation at CEM14/MI-8 in Goa, India**
- Main announcements and HoD “endorsement”
  - GPFM Side events on 20 July
- 13:40–13:45 **AOB and conclusions**

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# ExCo16 Participants



MI Countries			MI Countries			Private sector			International organisations		
Name	Member	Org./Country	Name	Member	Org./Country	Name	Member	Org./Country	Name	Member	Org.
<b>Jian Sun</b>	China	MOST	Peta Olesen	Australia	DISER	Ivano Fadanelli	Alperia	Italy	Francisco Boshell	IRENA	IRENA
Anna Stephenson	UK	DESNZ	Niall Jacobsen	Australia	DISER	Annalisa Andaloro	Alperia	Italy	<b>Arina Anisie</b>	IRENA	IRENA
Stefano Raimondi	Italy	MASE	<b>John K. Ward</b>	Australia	CSIRO	Ercole De Luca	Areti	Italy	Martina Lyons	IRENA	IRENA
Jiayu You	China	MOST	JBV Reddy	India	DST	Massimo Bonato	Areti	Italy	Mirlan Aldayarov	World Bank	WB
Yibo Wang	China	IEE CAS	N.P. Padhy	India	IITR	<b>Viviana Vitto</b>	Enel Grids	Italy	Vida Rozite	IEA	IEA
<b>Jia Zhang</b>	China	IEE CAS	Akash Sagar	India	IITR	Mena Testa	Enel Grids	Italy	Pauline Henriot	IEA	IEA
<b>Ran Bi</b>	China	IEE CAS	Arpit Kumar	India	IITR	Endi Zhai	Goldwind	China	Emi Bertoli	IEA	IEA
Sarah Butler	UK	DESNZ	Hisham Alhassnan	S. Arabia	Min. of Energy	Qizhong Shi	Goldwind	China	Ghislaine Kieffer	IEA	IEA
Marcello Capra	Italy	MASE	Basel Alsubaity	S. Arabia	Min. of Energy	<b>Gavin Starks</b>	Icebreaker One	UK	Irmgard Herold	MI Secretariat	
<b>Teo Martin</b>	Italy	MASE	<b>Abdullah Almehezia</b>	S. Arabia	KACST	<b>Jenna Ilic</b>	Icebreaker One	UK	Andrew Pease	MI Secretariat	
<b>Francesco Luca Basile</b>	Italy	Uni. BO	<b>Cristina Trueba</b>	Spain	MCIN	Zhenguo Li	longi	China	Tom Rollason	Private Sector Engagement	
Eleonora Sanseverino	Italy	Uni. PA	<b>Oscar Izquierdo Monge</b>	Spain	CIEMAT	Yaohua Shang	longi	China			
<b>Luciano Martini</b>	Italy	RSE	<b>Felix Téllez</b>	Spain	CIEMAT	Li Jiang	longi	China			
<b>Mattia Cabiati</b>	Italy	RSE	<b>Luis Manuel Santos</b>	Spain	EDP	Si Wang	longi	China			
<b>Viktorii Fedorova</b>	Italy	RSE	<b>Eva María González</b>	Spain	MCIN	Dong Wang	longi	China			
<b>Gloria Scalco</b>	Italy	RSE	Sabine Mitter	Austria	BMK	Chen Zhu	longi	China			
Rachele Nocera	Italy	MUR	<b>Helfried Brunner</b>	Austria	AIT	Amir Alikhanzadeh	National Grid	UK			
Francesco Sergi	Italy	CNR	<b>Gustavo Ponte</b>	Brazil	EPE	<b>Alexander Riddiford</b>	National Grid	UK			
Ilaria Bencini	Italy	CNR	<b>Michele Souza</b>	Brazil	EPE	Sebastian Van Dort	BSI Group	UK			
Monica Fabrizio	Italy	CNR	<b>Alexandre Prieur</b>	Canada	NRCAN	Abbey Dorian	BSI Group	UK			
Giorgio Graditi	Italy	ENEA	Patrick McCauley	Canada	NRCAN	Dan Clarke	ENA	UK			
<b>Maria Valenti</b>	Italy	ENEA	<b>Josef Ayoub</b>	Canada	NRCAN	Farina Farrier	ENA	UK			
			<b>Maria Getsiou</b>	EU	EC	Alberto Biancardi	GSE	Italy			
			Peter Horvath	EU	EC	Alberto Jr Pela	GSE	Italy			
			Ralf Eickhoff	Germany	Fz Juelich	Luca Marchisio	TERNA	Italy			
			Yuko Kono	Japan	METI	Luca Orrù	TERNA	Italy			
			Masashi Shiraishi	Japan	METI	Stefano Tedeschi	TERNA	Italy			
			Koreeda Kenichiro	Japan	METI	Antonio Iliceto	ETIP-SNET	EU			
			Jun Hashimoto	Japan	AIST						
			<b>Maruta Akiteru</b>	Japan	Technova						
			TBC	Netherlands	-						
			Heejung Cho	R. of Korea	MOTIE						
			InAe Cho	R. of Korea	KETEP						

ExCo16 participants in **bold**

13:00–13:05 **Welcome and introduction**

13:05–13:30 **National Pilots Report: presentation, discussion and approval**

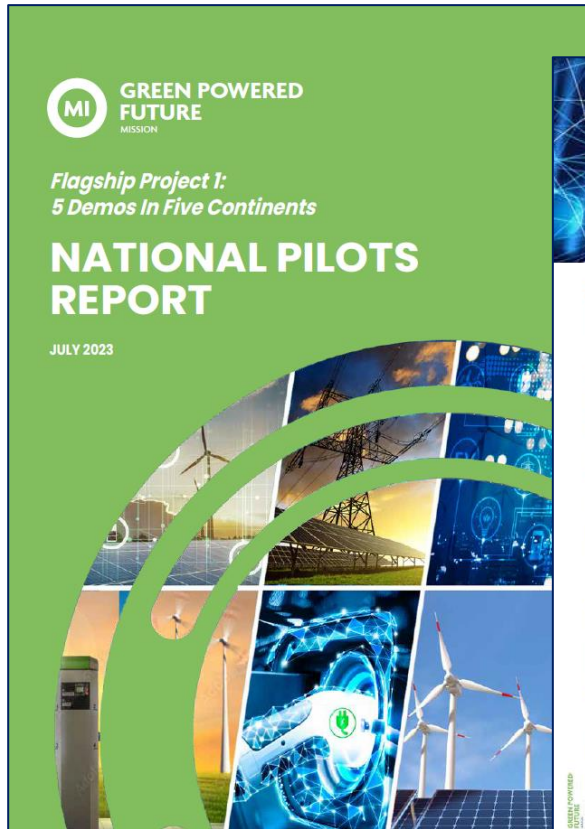
- Latest revisions and inputs
- Open discussion and approval

13:30–13:40 **GPFM participation at CEM14/MI-8 in Goa, India**

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# National Pilots Report: Final draft



## 1. NATIONAL PILOTS SURVEY MAIN OUTCOMES

As part of the development of its Flagship Project 1-5 demos in five continents, the Green Powered Future Mission started a process to collect relevant information about coalition members pilots project fully aligned with the Mission's scope and objectives. The main information about ongoing and planned GPFM members' national pilot projects, tackling one or more of the 50 most urgent Innovation Priorities identified in the Action Plan 2022-2024, has been collected by means of the National Pilots Survey. This survey exercise was very well received by the GPFM coalition and allowed to collect a broad range of responses by 25 GPFM members from 13 different countries and detailed information related to 80 pilot projects either ongoing or foreseen to be launched by Q4 2024.

For each of the 80 national pilots the following information has been collected and analyzed: title, acronym and short description, starting date, duration, coordinator and main involved partners, funding scheme (public, private or co-funded), overall budget (M€), openness to International Cooperation, and website link. Moreover, the respondents to this survey have been requested to indicate the main R&I themes and Innovation Priorities tackled by the projects, as well as most relevant High-level Use Cases.

The main outcomes of the National Pilots Survey, which laid the ground for the present report, are summarized in the figure reported in this page. First of all, the number of collected national pilot projects largely exceeded the initial GPFM expectations reported in the mission's Action Plan 2022-2024: 80 versus 20+.

Moreover, this survey showed that the 80 pre-collected projects cover all the 50 Innovation Priorities identified in the GPFM Action Plan 2024 and reported in the Appendix. Regarding the pilot project budget, the data evidenced that the majority of the submitted projects has a budget between 1 to 5 M€ (but a significant portion of projects (29%) has a budget larger than 10 M€). The survey showed an important portion of projects are supported by public fundings (53%) including 18% of EU fund, public-private (co-funded) projects account 42%, and privately funded projects account to remaining 5%.

2/3 of projects have a dedicated website publicly available information and it is very good for the future activity that a large fraction of the projects (57%) is open to International Cooperation. The collected pilot projects that are fully aligned with the Mission's goals and priorities will constitute the building blocks of the FPI continental of that are expected to address power systems up to 80% VRE in different geography and climate.

### National Pilots Survey in figures

<b>Project Budget (in M€)</b>	<b>80 projects submitted</b>	<b>Funding Scheme</b>
<ul style="list-style-type: none"> <li>From 0 to 5 M€: 29%</li> <li>From 5 to 10 M€: 49%</li> <li>Over 10 M€: 22%</li> <li>N.A.: 0%</li> </ul>	<ul style="list-style-type: none"> <li>ongoing: 25%</li> <li>planned: 55%</li> </ul>	<ul style="list-style-type: none"> <li>Public funded: 53%</li> <li>Co-funded: 42%</li> <li>Private: 5%</li> </ul>
<b>International Cooperation (INCO)</b>	<b>50% out of 80 covered</b>	<b>Info publicly available of internet</b>
<ul style="list-style-type: none"> <li>No: 44%</li> <li>Yes: 56%</li> </ul>	<ul style="list-style-type: none"> <li>50+ Use Cases: 20 M€ &gt; 10€</li> </ul>	<ul style="list-style-type: none"> <li>Website: 57%</li> <li>Website known: 38%</li> </ul>

## ITALY

**Decarbonisation targets**  
Italian energy system has undergone a significant evolution in the last decades thanks to the massive deployment of VRE sources. The 10-year Integrated National Energy and Climate Plan (NECP) has set ambitious goals for the energy transition in the period from 2021 to 2030, including the phase-out of coal by 2025, the reduction of GHG emissions by 53% compared to 2005, and a considerably higher share of renewables in gross final energy consumption (30%) by 2030. NECP also refers to a full decarbonisation of Italy's energy system by 2050. It is important to underline that as requested, in June 2023 Italy submitted to the European Commission an updated and more ambitious NECP.

**Main innovation activities**  
An important program supporting R&D activities in the energy sector is the "National Fund for Electric System Research" (R&S), which aims to enhance competitiveness, security, and sustainability of the Italian electricity system. R&S projects are implemented by public R&D institutions, namely CNR, ENA, and RSE in the framework of 3-year Program Agreements with the Italian Ministry MASE (Ministry of Environment and Energy Security). R&S activity spans over the entire electric system and benefits also by contributions from Universities and R&D organizations. R&S R&D topics include energy scenarios, integration of distributed generation, energy storage, active distribution network control, automation and related ICT technologies, and system aspects of demand response. The main results from the R&S projects are publicly available.

**Electricity generation mix and net import (EU data 2022)**

**Italy Pilot #1 RSE**

**Project name / acronym**  
R&S - Power system evolution, planning, management, and operation

**Project short description**  
The main fields of this project are: new system architecture, DC and AC transmission and distribution grid, observability, protection, control, monitoring, power quality, innovative technologies and superconductivity grid applications, planning (tool and methodologies development), adequacy, security, resilience, standardization activity and institutions support at national and international level.

The objective of the activities is the pursuit of an efficient management of the Italian electricity system in order to satisfy, in perspective scenarios, operational security and quality criteria, adequacy and resilience. Efficient management must guarantee minimum costs for users and involves the exploitation of renewable energy sources, in particular wind and photovoltaic energy. To exploit these variable and non-programmable energy sources, it is necessary to have a secure, resilient network infrastructure with adequate "hosting capacity".

**Main involved partners**  
Unar&E, IREN, Politecnico di Milano, Politecnico di Torino, University of Cagliari, University of Palermo

**Innovation Priorities addressed**

Green Powered Future Mission: National Pilots Report



**Thank you for your contribution to the National Pilots Report!**

Valuable contributions from GPFM members allowed to showcase **80 ongoing and planned National pilot projects worldwide**, fully aligned with the "5 demos in five continents" Flagship Project 1

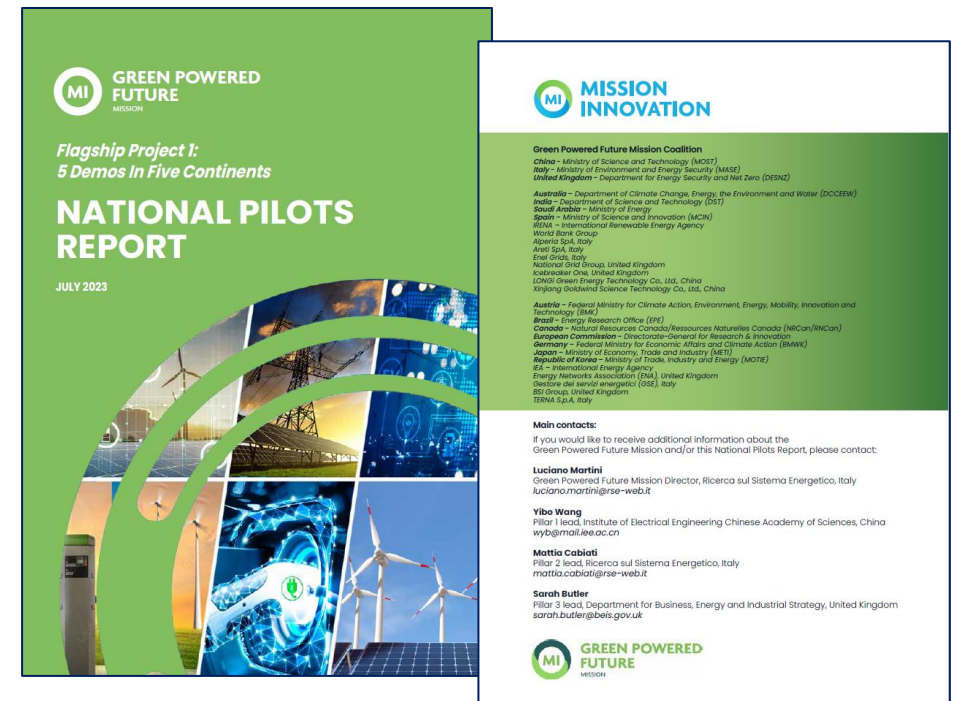
# National Pilots Report: Open discussion and approval

National Pilots Report final inputs and amendments:

- Graphic design (images, graphics)
- Texts
- Proofreading

We already implemented all the inputs received so far. All new inputs received by tomorrow morning (CEST) will be sent to the external firm for their implementation into the final doc version.

The final Report version will be then sent to printing by **Monday morning** in order to print out **100 hard copies** to be released and distributed at CEM14/MI-8 in Goa!





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# CEM14/MI-8 on 19–22 July 2023



## GPFM announcements at CEM14/MI-8:

- FP1 first deliverable: **National Pilots Report official release**
- Launching of the **Joint Call module** supporting FP2 “Multilateral Research Programme” in collaboration with CETPartnership

## GPFM main engagements at CEM14/MI-8:

- ISGAN-GPFM Joint side event (9:00 on 20 July)
- GPFM-dedicated event (10:45 on 20 July)
- Joint side event with ISGAN and 21CPP (15:00 on 20 July)
- CEM/MI side events and Plenary sessions



Please make sure your HoD is informed about the GPFM and – If possible – could mention our activity during one of his/her speeches in any of the closed-door plenary sessions.

# GPFM participation at CEM14/MI-8: Side events schedule



N.	Date and Time	Title of the event	Venue
[31]	20 July 2023 09:00-10:30	<b>ISGAN-GPFM side event</b> CEM ISGAN – MI GPFM collaboration for power system transformation, with special focus on policy and private sector engagement	Salao 3
[105]	20 July 2023 10:45-12:15	<b>GPFM event</b> Spotlight on GPFM: towards 5 demos in five continents	Salao 1
[38]	20 July 2023 15:00-16:30	<b>ISGAN-2ICPP-GPFM side event</b> CEM-MI collaboration for technology innovation and implementation, policy, and regulatory actions to rapidly decarbonize power systems	Salao 2
[28]	21 July 2023 at about 17:30	<b>ISGAN event</b> Smart Grids Innovation Showcase: The 9th Annual ISGAN Awards Ceremony	Plenary

<https://cem-mi-india.org/agenda>

# ISGAN-GPFM joint side-event



## Draft Agenda for ISGAN-GPFM joint side-event 20 July, 09:00-10:30, Venue: Salao 3



### CEM ISGAN – MI GPFM collaboration for power system transformation, with special focus on policy and private sector engagement

Date: 20 July 2023      Time: 09:00-10:30      Location: Salao 3, Grand Hyatt Goa

Power systems transformation is a core pillar of net zero transitions and a key CEM-MI focus. The event will showcase the collaboration between ISGAN and the GPFM following to the MoU signature at CEM13/MI-7 in Pittsburgh.

The event will also represent a great opportunity to explore effective ways to drive the public-private sector engagement, as well as to underline the commitment of private sector stakeholders on the ISGAN and GPFM activities.

The GPFM will showcase its innovation strategy and Flagship Projects' activities, while ISGAN will present its last outcomes and will release the KSP workshop/Inter-Working Groups reports.

The event will also bring together Minister-level/Senior Officials and CEOs/CTOs in a collaborative environment to express their thoughts, opinions, and perspectives for advancing private sector engagement.

The outcomes from this side event are meant to bolster GPFM and ISGAN collaboration supporting the flexibility of the power market and digitalization of the electricity grid.

#### ► About the International Smart Grid Action Network

The International Smart Grid Action Network (ISGAN) was launched at the 2010 Clean Energy Ministerial (CEM) in Washington D.C., USA, and formally organized via the Implementing Agreement for a Co-operative Programme on Smart Grids (ISGAN) in 2011 under a framework of the International Energy Agency (IEA). ISGAN leverages its dual roles as an IEA Technology Collaboration Programme (TCP) and CEM initiative to provide an international platform and community of experts dedicated to the development and exchange of expertise and competencies on smarter, cleaner, and more flexible electricity networks. ISGAN provides an important channel for communication of smart energy-related knowledge, trends, lessons learned, and future plans in support of national, regional, and global climate and clean energy objectives. As part of its mission, ISGAN has established the annual Award of Excellence to recognize excellence in smart grid projects, policies, and programs.

#### ► About the Green Powered Future Mission

The Green Powered Future Mission (GPFM), launched within the second phase of the global initiative Mission Innovation (MI2.0), is a public-private partnership with members from MI countries, private sector companies and international organisations. It aims to demonstrate that by 2030, power systems in different geographies and climates can effectively integrate up to 100% variable renewable energies, like wind and solar, in their generation mix, and maintain a cost-efficient, secure and resilient system. The GPFM is a 10-year endeavour which will accelerate innovation in clean energy by demonstrating innovative solutions to transform the present system. The GPFM is organised around three R&I pillars covering the whole spectrum of power system innovation needs:

Pillar 1 - Affordable and reliable VRE; Pillar 2 - System flexibility and market design; Pillar 3 - Data and digitalisation for system integration.

<https://www.iea-isan.org>  
<https://explore.mission-innovation.net/mission/green-powered-future/>



#### ► Agenda (Draft)

Time	Program	Facilitator/Speaker
9:00-9:05	Welcome and Introduction	Luciano Martini, RSE (Italy)
9:05-9:15	Opening Remarks and the importance of the CEM and MI close collaboration	Kyungsung Kang, Vice Minister, MOTIE (Korea) Rosalinde van der Vlies, MISC Vice Chair Prasoon Agarwal, Acting Head of CEM Secretariat TBC
9:15-9:25	ISGAN-GPFM collaboration: Impact and Synergies	Arun Mishra, ISGAN vice-Chair / Russ Conklin Yibo Wang, GPFM co-Lead
9:25-9:40	GPFM innovation strategy and Flagship Projects: Release of the National Pilots Reports	Luciano Martini, GPFM Director / Yibo Wang
	ISGAN recent outcomes: the KSP workshop and Inter-Working Groups reports	Sky JongCheon Son, KSGI, ISGAN co-Secretariat
9:40-10:25	Power Sector Roundtable: Minister-Level/Senior Officials and CEOs/CTOs expressing their thoughts, opinions, and perspectives for advancing power system innovation with special focus on policy and private sector engagement	<ul style="list-style-type: none"> <li>Moderator: Luciano Martini TBC</li> <li>Government Reps: Amanda Wilson, DG NRCan/Chair IEA CERT Ajay Tiwari, Additional Secretary Power, India TBC Siva Gunda, Vice Chair, California Energy Commission TBC</li> <li>Private Sector Reps: Reena Suri, Executive Director, ISGF N. P. Padhy, Director MNIT Jaipur, India TBC Claudio Facchin, Global CEO, Hitachi Energy TBC Endi Zhai, CTO, Goldwind Jungcho Lee, Vice President, KEPCO</li> </ul>
10:25-10:30	Wrap up and adjourn until the following GPFM side event	Arun Mishra, ISGAN vice-Chair Yibo Wang, GPFM co-Lead

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CEM ISGAN – MI GPFM collaboration for power system transformation, with special focus on policy and private sector engagement		
Time	Session	Possible Speakers/Guests
9:00-9:05	Welcome and Introduction	Luciano Martini, RSE (Italy)
9:05-9:15	<b>Opening Remarks</b> and the importance of the CEM and MI close collaboration	Kyungsung Kang, Vice Minister, MOTIE (Korea) Rosalinde van der Vlies, MISC Vice Chair Prasoon Agarwal, Acting Head of CEM Secretariat <b>TBC</b>
9:15-9:25	<b>ISGAN-GPFM collaboration:</b> Impact and Synergies	Arun Mishra, ISGAN vice-Chair / <b>Russ Conklin</b> Yibo Wang, GPFM co-Lead
9:25-9:40	<b>GPFM innovation strategy and Flagship Projects:</b> Release of the National Pilots Reports	Luciano Martini, GPFM Director / Yibo Wang
	<b>ISGAN recent outcomes:</b> the KSP workshop and Inter-Working Groups reports	Sky JongCheon Son, KSGI, ISGAN co-Secretariat
9:40-10:25	<b>Power Sector Roundtable:</b> Minister-Level/Senior Officials and CEOs/CTOs expressing their <b>thoughts, opinions, and perspectives for advancing power system innovation with special focus on policy and private sector engagement</b>	<ul style="list-style-type: none"> <li>• Moderator: <b>Luciano Martini TBC</b></li> <li>• Government Reps: <b>Amanda Wilson</b>, DG NRCAN/Chair IEA CERT <b>Ajay Tiwari</b>, Additional Secretary Power, India <b>TBC</b> <b>Siva Gunda</b>, Vice Chair, California Energy Commission <b>TBC</b></li> <li>• Private Sector Reps: <b>Reena Suri</b>, ISGF Executive Director <b>N. P. Padhy</b>, Director MNIT Jaipur, India <b>TBC</b> <b>Claudio Facchin</b>, Global CEO, Hitachi Energy <b>TBC</b> <b>Endi Zhai</b>, CTO, Goldwind <b>Jungho Lee</b>, Vice President, KEPCO</li> </ul>
10:25-10:30	<b>Wrap up</b> and adjourn until the following GPFM side event	Arun Mishra, ISGAN vice-Chair Yibo Wang, GPFM co-Lead

# GPFM dedicated side-event



## Draft Agenda for GPFM dedicated side-event 20 July, 10:45-12:15, Venue: Salao 1



### Green Powered Future Mission Side Event

#### “Spotlight on GPFM: Towards 5 demos in five continents”

Date: 20 July 2023 Time: 10:45-12:15 Location: Salao 1, Grand Hyatt Goa

This event will represent a great opportunity for the Green Powered Future Mission (GPFM) to showcase progress and initial outcomes on the Flagship Project FP1 “5 demos in five continents” launched in September 2022 at the GCEAF CEM13/MI-7 in Pittsburgh. In particular, the Mission will release the “FP1 5 demos in five continents: National Pilots Report” that collects relevant information about a great number (80 in total) of ongoing or planned national pilot projects fully aligned with the Mission’s scope and priorities as identified by GPFM members.

Each of the selected projects tackles one or more of the 50 most urgent Innovation Priorities identified in the GPFM Action Plan 2022-2024, thus spanning all the Mission’s three R&I pillars. At this initial stage, FP1 national pilot projects are expected to search, implement, and demonstrate innovative solutions allowing to run power systems located in at least 5 different continents with up to 80% VRE.

Moreover, GPFM will make the announcement about the established fruitful collaboration with the CETPartnership and the upcoming Joint Call Module 2023 supporting Flagship Project FP2 “Multilateral Research Programme”.

The event will also be an opportunity to present an overview of India contribution to the GPFM activities in view of the Asian demonstration projects launching by bringing together Indian and International GPFM experts from industry and academia in a collaborative environment to discuss and present exemplary of Innovation programmes and initiatives.

#### ► About the Green Powered Future Mission

The Green Powered Future Mission (GPFM), launched within the second phase of the global initiative Mission Innovation (MI2.0), is a public-private partnership with members from MI countries, private sector companies and international organisations. It has already made important steps in order to demonstrate that by 2030, power systems in different geographies and climates can effectively integrate up to 100% variable renewable energies, like wind and solar, in their generation mix, and maintain a cost-efficient, secure and resilient system. The GPFM is a 10-year endeavour which will accelerate innovation in clean energy by demonstrating innovative solutions to transform the present system. The GPFM is organised around three R&I pillars covering the whole spectrum of power system innovation needs:

Pillar 1 - Affordable and reliable VRE;

Pillar 2 - System flexibility and market design;

Pillar 3 - Data and digitalisation for system integration.

<https://cem-mi-india.org/>  
<https://explore.mission-innovation.net/mission/green-powered-future/>



#### ► Side event Agenda (Draft)

Time	Program	Facilitator/Speaker
10:45 – 11:00	Welcome and Opening remarks on the importance of power systems decarbonization	Anita Gupta, Head & Advisor/Scientist – G, DST, India TBC Julie Cerqueira, MISC Chair TBC Anna Stephenson, Deputy Director, DESNZ, UK GPFM UK co-Lead TBC
11:00 – 11:10	GPFM innovation strategy and the main activities on the FP1 “5 demos in five continents”	Luciano Martini, GPFM Director
11:10 – 11:20	Asian Demonstration Launching Ceremony: From national pilots to Continental Demo	Yibo Wang, Pillar 1 Lead, IEECAS, China
11:20 – 11:25	Overview of India’s contribution to the GPFM activities	J. B. V. Reddy, Scientist - F / Director, DST, India N. P. Padhy, Director MNIT Jaipur, India
11:25 – 12:05	Panel discussion Spotlight on GPFM: Exemplary of key Innovation programmes and initiatives by coalition members - with special focus on India (3-4 mins presentation each + open discussion)	Moderator: N. P. Padhy, Director MNIT Jaipur Santi Pada Gon Chaudhuri, IEST Shibpur Zakir Rather, IIT Bombay Suman Maiti, IIT Kharagpur Abhishek Ranjan, Renew Power Pradeep Kumar, MD of LONGI Solar India Scott Hamilton, Senior Advisor, Zero Carbon Hydrogen, Smart Energy Council, Australia Ignacio García Fenoll, Subdirector General, Ministerio de Ciencia e Innovación, Spain
12:05 – 12:10	Announcement for the 2023 open call supporting FP2 “Multilateral Research Programme” in Collaboration with the CETPartnership	Luciano Martini, GPFM Director Yibo Wang, Pillar 1 Lead, IEECAS, China
12:10 – 12:15	Concluding remarks	Hongshan Gao, Minister Counsellor, Embassy of China in India TBC

<https://cem-mi-india.org/>  
<https://explore.mission-innovation.net/mission/green-powered-future/>



# Draft Agenda for GPFM dedicated side-event

## 20 July, 10:45-12:15, Venue: Salao 1



Spotlight on GPFM: Towards 5 demos in five continents		
Time	Session	Possible Speakers/Guests
10:45 – 11:00	<b>Welcome and Opening remarks</b> on the importance of power systems decarbonization	<b>Anita Gupta</b> , Head & Advisor/Scientist – G, DST, India <b>TBC</b> <b>Julie Cerqueira</b> , MISC Chair <b>TBC</b> <b>Anna Stephenson</b> , Deputy Director, DESNZ, UK, GPFM UK co-Lead
11:00 – 11:10	<b>GPFM innovation strategy</b> and the <b>main activities</b> on the FP1 “5 demos in five continents”	<b>Luciano Martini</b> , GPFM Director
11:10 – 11:20	<b>Asian Demonstration Launching:</b> From national pilots to Continental Demo	<b>Yibo Wang</b> , Pillar 1 Lead, IEECAS, China
11:20 – 11:25	Overview of <b>India’s contribution</b> to the GPFM activities	<b>J. B. V. Reddy</b> , Scientist - F / Director, DST, India <b>N. P. Padhy</b> , Director MNIT Jaipur, India
11:25 – 12:05	Panel discussion <b>Spotlight on GPFM: Exemplary of key Innovation programmes and initiatives by coalition members - with special focus on India</b> (3-4 mins presentation each + open discussion)	Moderator: <b>N. P. Padhy</b> , Director MNIT Jaipur <ul style="list-style-type: none"> <li>• <b>Santi Pada Gon Chaudhuri</b>, IEST Shibpur</li> <li>• <b>Zakir Rather</b>, IIT Bombay</li> <li>• <b>Suman Maiti</b>, IIT Kharagpur</li> <li>• <b>Abhishek Ranjan</b>, Renew Power</li> <li>• <b>Pradeep Kumar</b>, MD of LONGi Solar India</li> <li>• <b>Scott Hamilton</b>, Senior Advisor, Zero Carbon Hydrogen, Smart Energy Council, Australia</li> <li>• <b>Ignacio García Fenoll</b>, Subdirector General, Ministerio de Ciencia e Innovación, Spain</li> </ul>
12:05 – 12:10	Announcement for the <b>2023 open call supporting FP2 “Multilateral Research Programme”</b> in Collaboration with the CETPartnership	<b>Luciano Martini</b> , GPFM Director <b>Yibo Wang</b> , Pillar 1 Lead, IEECAS, China
12:10 – 12:15	Concluding remarks	<b>Hongshan Gao</b> , Minister Counsellor, Embassy of China in India <b>TBC</b>

# ISGAN-21CPP-GPFM joint side-event



## Draft Agenda for ISGAN-21CPP-GPFM joint side-event 20 July 15:00-16:30, Venue: Salao 2



### CEM-MI collaboration for technology innovation and implementation, policy, and regulatory actions to rapidly decarbonize power systems

**Date:** 20 July 2023      **Time:** 15:00-16:30      **Location:** Salao 2, Grand Hyatt Goa

International collaboration facilitates knowledge sharing thus avoiding duplication of work and leveraging of existing synergies to make a greater impact towards the energy transition.

The event will foster further collaboration between the CEM Workstreams ISGAN and 21CPP and MI GPFM, as well as the challenges towards power system decarbonization.

A high-level Roundtable on power will be held, addressing implementation, technology innovation, and policy and regulatory actions to rapidly decarbonize power systems.

ISGAN, 21CPP, GPFM, and 3DEN will showcase their synergy and innovation strategy, main activities, and related outcomes, and will underline the importance of accelerating power system decarbonization.

#### ► About the International Smart Grid Action Network

The International Smart Grid Action Network (ISGAN) was launched at the 2010 Clean Energy Ministerial (CEM) in Washington D.C., USA, and formally organized via the Implementing Agreement for a Co-operative Programme on Smart Grids (ISGAN) in 2011 under a framework of the International Energy Agency (IEA). ISGAN leverages its dual roles as an IEA Technology Collaboration Programme (TCP) and CEM initiative to provide an international platform and community of experts dedicated to the development and exchange of expertise and competencies on smarter, cleaner, and more flexible electricity networks. ISGAN provides an important channel for communication of smart energy-related knowledge, trends, lessons learned, and future plans in support of national, regional, and global climate and clean energy objectives. As part of its mission, ISGAN has established the annual Award of Excellence to recognize excellence in smart grid projects, policies, and programs.

#### ► About the 21<sup>st</sup> Century Power Partnership

The 21st Century Power Partnership (21CPP) aims to accelerate the global transformation of power systems. 21CPP is a multilateral effort of the Clean Energy Ministerial (CEM) and serves as a platform for public-private collaboration to advance integrated policy, regulatory, financial, and technical solutions for the large-scale deployment of renewable energy in combination with deep energy efficiency and smart grid solutions. 21CPP promises to add value to ongoing power system transformation efforts by expanding the network of expertise, accelerating learning and knowledge sharing, and elevating the visibility of national efforts.

#### ► About the Green Powered Future Mission

The Green Powered Future Mission (GPFM), launched within the second phase of the global initiative Mission Innovation (MI2.0), is a public-private partnership with members from MI countries, private sector companies and international organisations. It will demonstrate that by 2030, power systems in different geographies and climates can effectively integrate up to 100% variable renewable energies, like wind and solar, in their generation mix, and maintain a cost-efficient, secure and resilient system. The GPFM is a 10-year endeavour which will accelerate innovation in clean energy by demonstrating innovative solutions to transform the present system. The GPFM is organised around three R&I pillars covering the whole spectrum of power system innovation needs:

Pillar 1 - Affordable and reliable VRE; Pillar 2 - System flexibility and market design; Pillar 3 - Data and digitalisation for system integration.

<https://www.iea-isgan.org/>  
<https://www.21stcenturypower.org/>  
<https://explore.mission-innovation.net/mission/green-powered-future/>



#### ► Agenda (Draft)

Time	Program	Facilitator/Speaker
15:00-15:05	Opening remarks	CEM and/or MI HoD(s) TBD
15:05-15:15	(Keynote) Grand challenges towards power systems decarbonization: present status and key actions	Paolo Frankl, Head of the Renewable Energy Division, IEA TBC
15:15-15:55	High-level Roundtable on power: implementation, technology innovation and policy and regulatory actions to rapidly decarbonize power systems	Moderator: Doug Arent, NREL, 21CPP High level panelists from Governments and private sector: Paula Pinho, Head of Unit, DG ENER, EC Roberto Bocca, Head of Energy and Materials, World Economic Forum Jennifer Layke, Head Energy, World Resources Institute Harmeet Bawa, Group Senior Vice President, Global Head of Government & Institutional Relations, Hitachi Energy Reji Kumaar Pillai, Chairman, GSEF Michio Kondo, Vice-Chair, MI TAG Joshi Balawant, Managing Director, Idam TBC
15:55-16:25	The need to accelerate innovation and to promote effective collaboration among global initiatives: • ISGAN power system modernization • 21CPP main activities and countries' action plans • GPFM and 3DEN innovation strategy and main activities  Open discussion and key recommendations on the needed coordination and collaboration	Arun Mishra/Sky JongCheon Son, ISGAN Presidium Prateek Joshi, Energy Engineer, NREL, 21CPP Luciano Martini, MI GPFM Director/ 3DEN Technical Advisor
16:25-16:30	Concluding remarks	Luciano Martini, ISGAN/MI GPFM

<https://www.iea-isgan.org/>  
<https://www.21stcenturypower.org/>  
<https://explore.mission-innovation.net/mission/green-powered-future/>



## CEM-MI collaboration for technology innovation and implementation, policy, and regulatory actions to rapidly decarbonize power systems

Time	Session	Possible Speakers/Guests
15:00-15:05	Opening remarks	CEM and/or MI HoD(s) <b>TBD</b>
15:05-15:15	Keynote: <b>Grand challenges towards power systems decarbonization: present status and key actions</b>	<b>Paolo Frankl</b> , Head of the Renewable Energy Division, IEA <b>TBC</b>
15:15-15:55	<b>High-level Roundtable on power:</b> implementation, technology innovation and policy and regulatory actions to rapidly decarbonize power systems	Moderator: <b>Doug Arent</b> , NREL, 21CPP High level panelists from Governments and private sector: <ul style="list-style-type: none"> <li>• <b>Paula Pinho</b>, Head of Unit, DG ENER, EC</li> <li>• <b>Roberto Bocca</b>, Head of Energy and Materials, World Economic Forum</li> <li>• <b>Jennifer Layke</b>, Head Energy, World Resources Institute</li> <li>• <b>Harmeet Bawa</b>, Group Senior Vice President, Global Head of Government &amp; Institutional Relations, Hitachi Energy</li> <li>• <b>Reji Kumar Pillai</b>, Chair, GSEF</li> <li>• <b>Michio Kondo</b>, Vice-Chair MI TAG</li> <li>• <b>Joshi Balawant</b>, Managing Director, Idam <b>TBC</b></li> </ul>
15:55-16:25	The need to accelerate innovation and collaboration among global initiatives: <ul style="list-style-type: none"> <li>• ISGAN power system modernization</li> <li>• 21CPP main activities and countries' action plans</li> <li>• GPFM and 3DEN innovation strategy and main activities</li> </ul> <b>Open discussion</b> and key recommendations on the needed coordination and collaboration	<b>Arun Mishra/Sky JongCheon Son</b> ISGAN Presidium <b>Prateek Joshi</b> , Energy Engineer, NREL, 21CPP <b>Luciano Martini</b> , MI GPFM Director/ 3DEN Technical Advisor
16:25-16:30	<b>Concluding remarks</b>	<b>Luciano Martini</b> , ISGAN/MI GPFM

- 13:00–13:05 **Welcome and introduction**
- 13:05–13:30 **National Pilots Report: presentation, discussion and approval**
- Latest revisions and inputs
  - Open discussion and approval
- 13:30–13:40 **GPFM participation at CEM14/MI-8 in Goa, India**
- Main announcements and HoD “endorsement”
  - GPFM Side events on 20 July
- 13:40–13:45 **AOB and conclusions**



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FUTURE**  
MISSION

# Thank you for your attention

## Main Contacts:

Luciano Martini

luciano.martini@rse-web.it

Yibo Wang **Pillar 1** lead

wyb@mail.iee.ac.cn

Mattia Cabiati **Pillar 2** lead

mattia.cabiati@rse-web.it

Sarah Butler **Pillar 3** lead

sarah.butler@beis.gov.uk

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