

UCF College of Engineering and Computer Sciences Dean's Advisory Board

Path towards our recent collaboration on
Hydrogen – The Time is Now event,
future actions, and further collaboration



133
Attended
 207 Registered

102
Virtual Attendees

80%
Email Open Rate

Keynote: DOE perspective for sustainable energy future

- Jennifer Wilcox, DOE

Fireside Chat with the Presidents

- Alexander Cartwright,
 President University of Central Florida
- Bill Newsom,
 President and CEO, Mitsubishi Power Americas

Panel 1: Developing and deploying hydrogen infrastructure and technologies to reach net zero

SwRI / Mitsubishi Power / PSM / AirLiquide / Texas Brine / Siemens Energy

Panel 2: A Hydrogen Economy to Decarbonize Operations and the Policies Needed to Support the Transition

Duke Energy / Universal / Texas Brine / Hydroplane



Part I
 View [HERE](#)

Part II
 View [HERE](#)

September 8, 2022

 **College of Engineering
and Computer Science**
UNIVERSITY OF CENTRAL FLORIDA

YOU'RE INVITED!
Fall Dean's Advisory Board Dinner & Meeting

DINNER:
Friday, November 12, 2021
6 p.m. - 8 p.m.
Location: Celeste Hotel, UCF Main Campus
4105 N Alafaya Trail, Orlando, FL 32826
[VIEW MAP HERE](#)
Guests Welcome
Dress: Business Casual
Complimentary Valet Parking at The Celeste Hotel

MEETING:
Saturday, November 13, 2021
8:30 a.m. - 2 p.m.
In-Person: Research 1, Rm 101
Building Access code 111321
4353 Scorpius St, Orlando, FL 32816
[VIEW MAP HERE](#)
ZOOM: [LINK](#)
Meeting ID: 980 5133 9265
Passcode: 410191
Dress: Business Casual
Please Park in [Garage C](#)
No Permit Will Be Needed For Saturday

*Kindly RSVP to Robin Knight at Robin.Knight@ucf.edu or
(407) 488-3162 before November 8th*

Spring DAB is scheduled for April 21 & 22

Fall 2021 DAB

- Provost discussed SIP
- Jay, Grace, etc.
- proposals



- Extended team
- Briefed Presidents
- Received buy-in



- Engaged Alex and Michael
- SIP extended



- Extended working team
- Heavy planning



- Michael, Jay, Shane meet
- Collaboration on DAB, SIP proposals, and local ecosystem
- Decarbonization/H2 Forum



- Introduction lunch meeting
- Decision finalized



- Special CECS Virtual Seminar
- Fireside Chat of Presidents



- The Event!

Hydrogen blending in gas turbines ...

Christopher Loving, Garrett Mastantuono, Anthony C. Terracciano, Subith S. Vasu

Funded by Mitsubishi Power and Florida HighTech Corridor

Hydrogen and Ammonia in GT

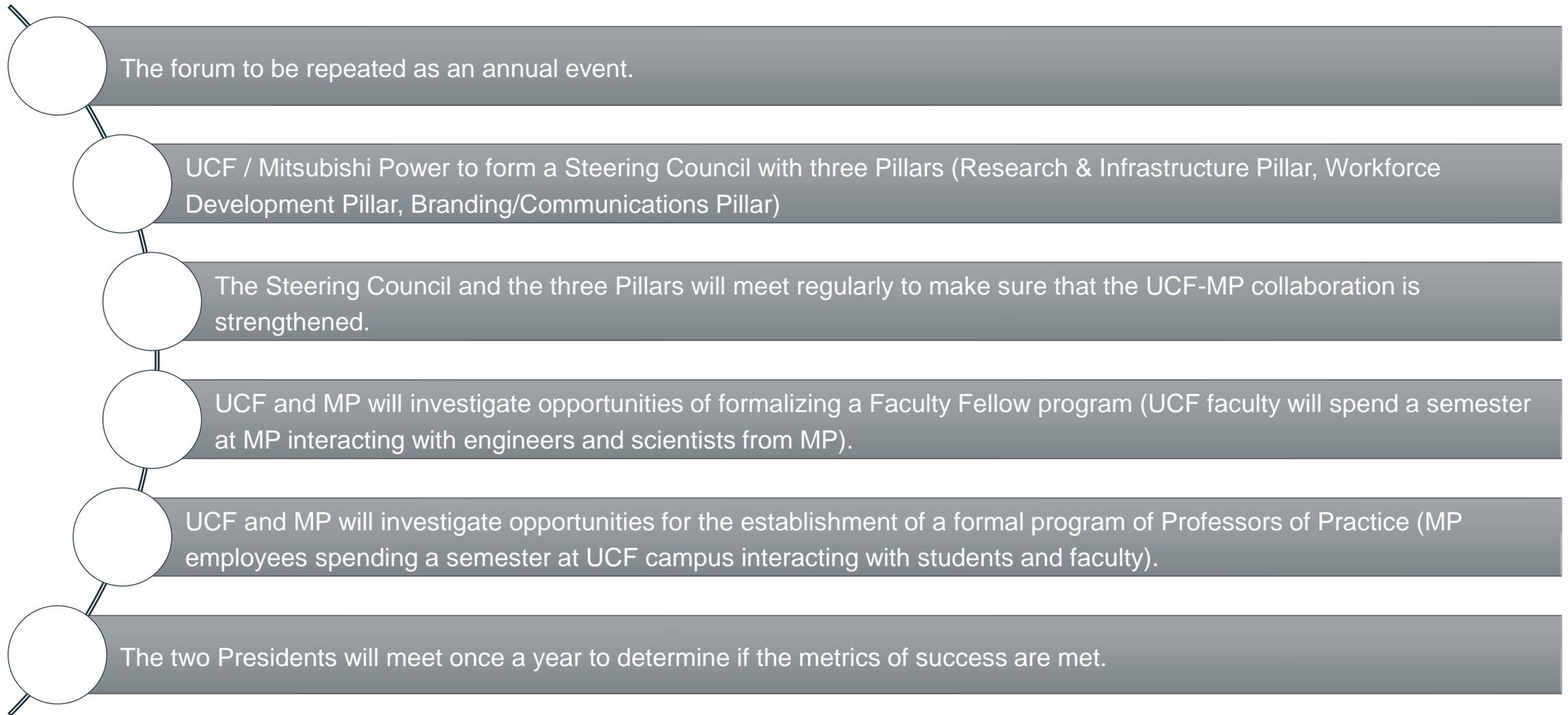
Funded by LCRI (Low Carbon Resource Initiative) and DOE FECM

Alternative Hydrogen Storage in a “Cryogenic Flux Capacitor”

Funded by DOE FECM

NASA University Leadership Initiative: “ALFA – Ammonia as a Liquid for the Future of Aviation”







This guy is a stud!



The hydrogen forum was successful in bringing together UCF, industry, and government partners to drive thought leadership in an important field that will impact human prosperity, as well as future careers for UCF's students.



Decarbonization is a big idea and many companies in central Florida, especially in the power and energy sector are investing in technology and people to help provide solutions ... UCF should continue to invest and lead the charge.



The hydrogen forum is just one collaboration idea ... what other ideas are out there to showcase UCF and the central Florida ecosystem's strengths, i.e. space, hospitality, simulation, etc.?



The forum concept is a vehicle to get together the regional ecosystem of sector stakeholders and UCF, and I would encourage the DAB members to consider leveraging it.

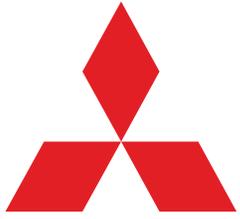


Charge on ... Go Knights!

Thank You!



Back Up



**MITSUBISHI
POWER**



**UNIVERSITY OF
CENTRAL FLORIDA**

A Decarbonized Future

UCF Hydrogen Forum

Briefing Presentation

12-13-21



~~UN CLIMATE
CHANGE
CONFERENCE
UK 2021~~

~~IN PARTNERSHIP WITH ITALY~~

UCF Climate Change Forum

Hydrogen Panel

In Partnership with Mitsubishi Power, Disney,
FP&L, DOE, etc.



Why the focus on hydrogen?

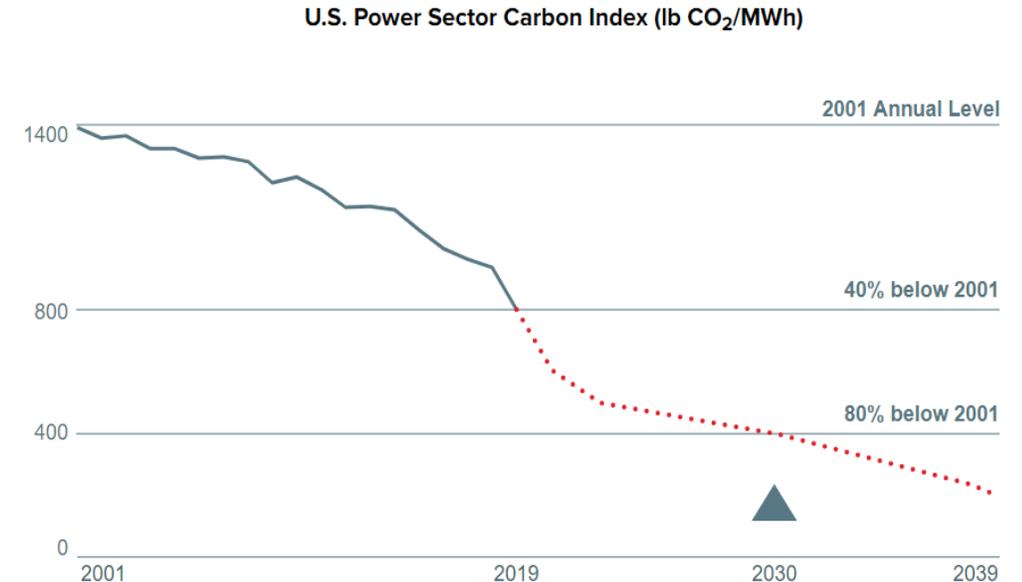
- Electricity is mandatory for **Human Prosperity**
- **Climate Change** is critical and relevant
- Hydrogen is **Key** to fighting climate change *and* reliable electricity
- Global/national/business **Momentum** – Time is now

Why UCF?

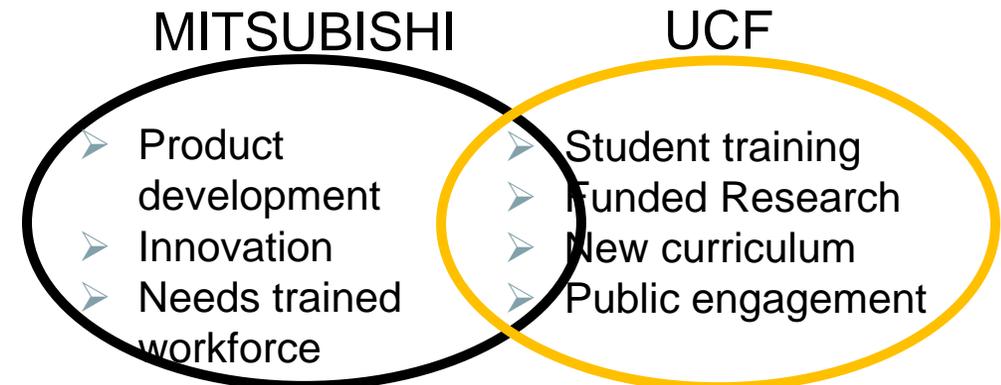
- **Central** to global stakeholders, i.e. Mitsubishi, FP&L, Disney, etc.
- UCF students will embrace this **Mission**
- H2 will support **Future Careers** in high technology

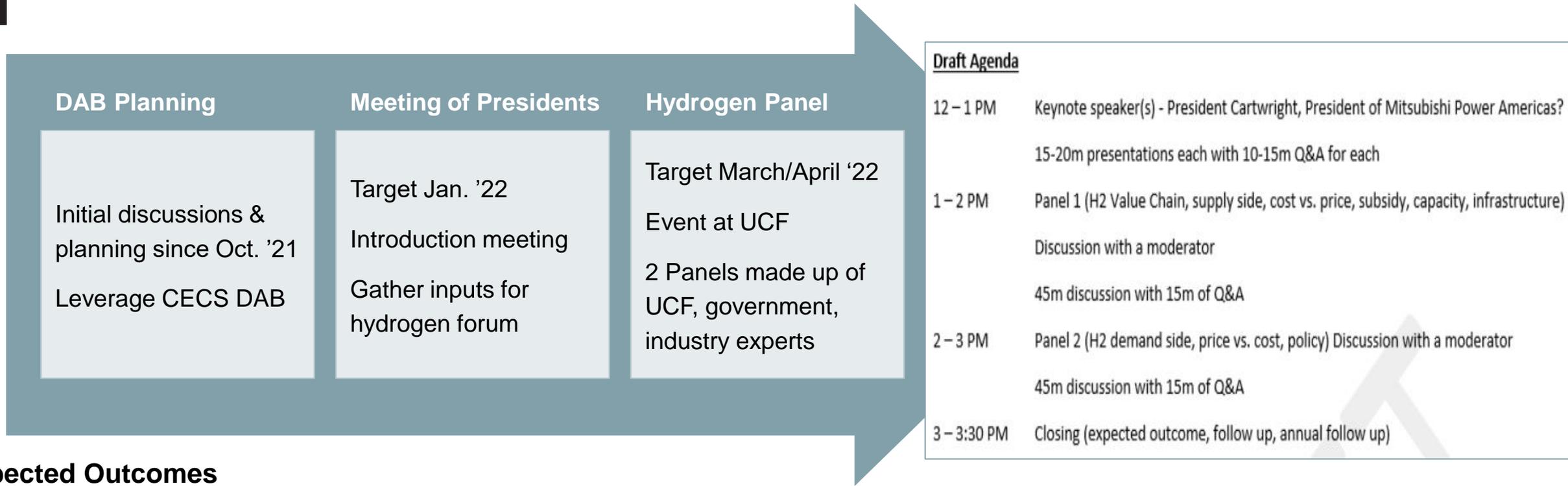
Why a hydrogen panel?

- Drive **Awareness** in these early years of the hydrogen economy
- UCF can and should be a **Leader** in this area
- Future **R&D** and other funding opportunities, i.e. Infrastructure bill



We will continue with rapid decarbonization, with an 80% reduction below 2001 carbon levels estimated by 2030.





Expected Outcomes

- Drive hydrogen awareness and interest as key to fighting climate change; invite public and media
- Energize students – UCF is leading the charge in hydrogen that will enable a better future
- Workforce development – UCF and FL industry can team together to graduate highly- & specially-trained students
- Branding of Florida – Global name recognition of Orlando and Florida as a destination for hydrogen/decarbonization innovation
- Climate change leadership council with hydrogen ambassadors, workforce development, future employment