

# STARTUP SPACE.

@ THE ASIA CLEAN ENERGY FORUM

DEEP DIVE WORKSHOP:

## FROM STARTUP TO SCALEUP

5 June 2018, 9 a.m.-5:30 p.m.  
Multifunction Hall 3



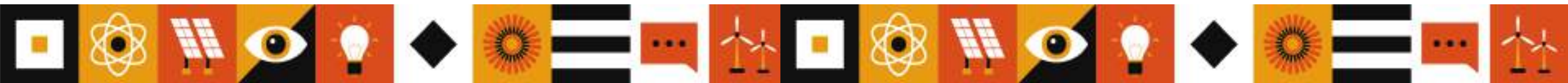
A photograph of a wind farm at sunset. The sky is a deep orange-red, and the ground is covered in low-lying vegetation. Several wind turbines are visible, with the largest one on the left. The word "WELCOME" is written in white, bold, sans-serif capital letters in the center of the image.

**WELCOME**



# **Daniel Hersson**

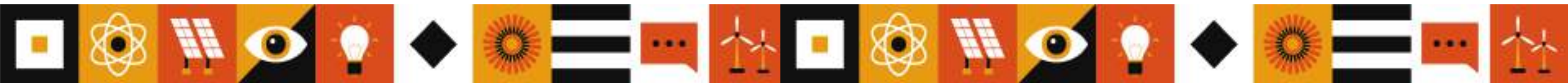
## **Team Leader, Cleantech VC/PE Project**





# **Danny Kennedy**

## **Managing Director**



# OBJECTIVE

Network & Community Building

International Cross Learning & Best Practice Sharing

Catalyzing Collaborative Projects



# GROUND RULES

Participate!

Listen to understand different perspectives

Contribute your ideas and experience

Minimize phones and laptops

Be on time!





# AGENDA (morning)

9:00 – 9:15am Opening remarks

9:15 – 9:20am Agenda Overview

9:20 – 9:45am Icebreaker and introduction

9:45 – 10:45am Group discussion: Acquiring and managing customers

10:45 – 11:15am Coffee break

11:15 – 12:15pm Group discussion: Access to talent

12:15 – 12:30pm Wrap up: Taking it forward

12:30 – 2:00pm Lunch





# AGENDA (afternoon)

- |               |   |
|---------------|---|
| 2:00 – 2:05pm | Welcome remarks & Scene-setting                           |
| 2:05 – 2:15pm | Scene-setting: Why collaborate?                           |
| 2:15 – 3:00pm | Panel: Experiences with corporate-startup collaborations  |
| 3:00 – 3:30pm | Coffee break  |
| 3:30 – 3:50pm | Presentation: Connecting startups and corporations        |
| 3:50 – 5:00pm | Breakout session: Corporate-startup collaboration in Asia |
| 5:00 – 5:25pm | Wrap up   |
| 5:25 – 5:30pm | Closing remarks   |



# INTRODUCTION

Who are you?

Where are you from?

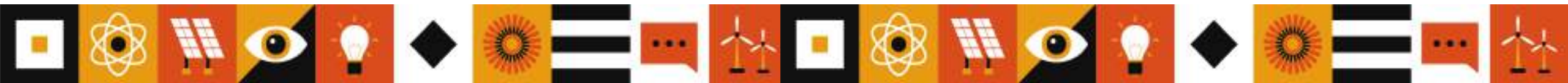
One-liner of what your company does?



# MINGLE MINGLE

What inspired you to build your startup?

What would you be doing if it wasn't this?



# GROUP DISCUSSION: ACCESS TO CUSTOMERS

What are your biggest challenges with acquiring new customers?

Best tips in finding, acquiring and managing customers? Any examples?

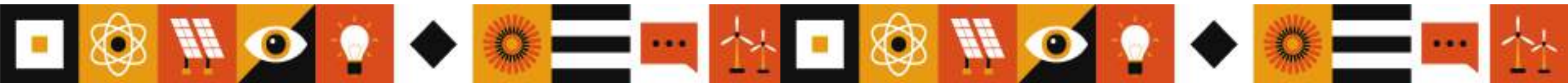


A photograph of a wind farm at sunset. The sky is a deep orange-red, and the ground is covered in low-lying vegetation. Several wind turbines are visible, with the largest one on the left. The text "COFFEE BREAK" is overlaid in the center.

**COFFEE BREAK**

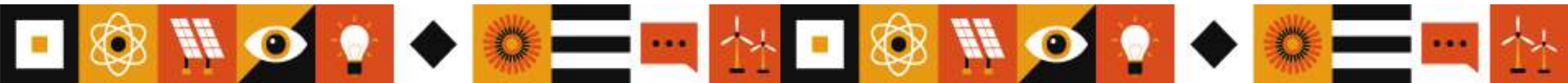
# GROUP DISCUSSION: ACCESS TO TALENT

What are the biggest challenges in  
recruiting and retaining top talent for your startup?



# GROUP DISCUSSION: ACCESS TO TALENT

Best tips, methodology and experiences  
for creating your top team

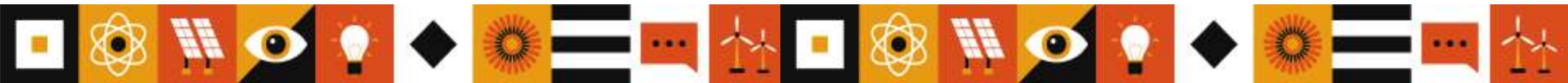


# WRAP UP

Share your insights on the morning session with us!

Fill out the survey

Be here at **1:50pm** for the afternoon session





A photograph of a wind farm at sunset. The sky is a deep orange-red, and the ground is covered in low-lying vegetation. Several wind turbines are visible, with the largest one on the left. The word "LUNCH" is written in white capital letters in the center of the image.

**LUNCH**



# STARTUP SPACE.

@ THE ASIA CLEAN ENERGY FORUM

DEEP DIVE WORKSHOP:

## FROM STARTUP TO SCALEUP

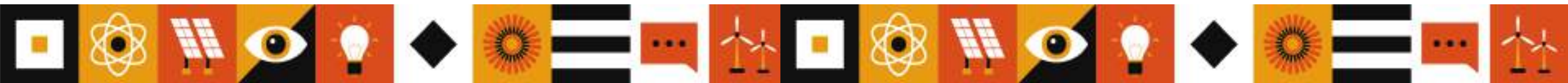
5 June 2018, 9 a.m.-5:30 p.m.  
Multifunction Hall 3





# **Daniel Hersson**

## **Team Leader, Cleantech VC/PE Project**



# ADB CLEANTECH SUPPORT IN ASIA



1

support  
cleantech  
accelerators



2

support  
cleantech  
investors



3

support  
networking &  
collaboration

# WHY WE NEED COLLABORATION

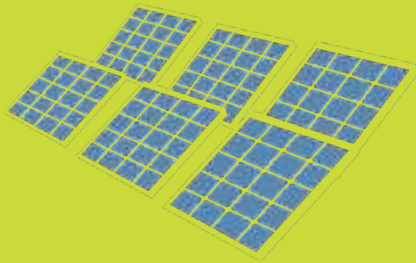
# BIG DISRUPTIONS, BIG CHANGE



COST OF  
**BATTERY**  
(Li-on, cell)

**1/6**

vs 10 years ago



COST OF  
**SOLAR PV**  
(module)

**1/6**

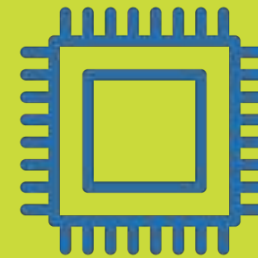
vs 10 years ago



COST OF  
**MOBILE**  
(smartphone)

**1/20**

vs 10 years ago



COST OF  
**COMPUTING**  
(processing)

**1/60**

vs 10 years ago



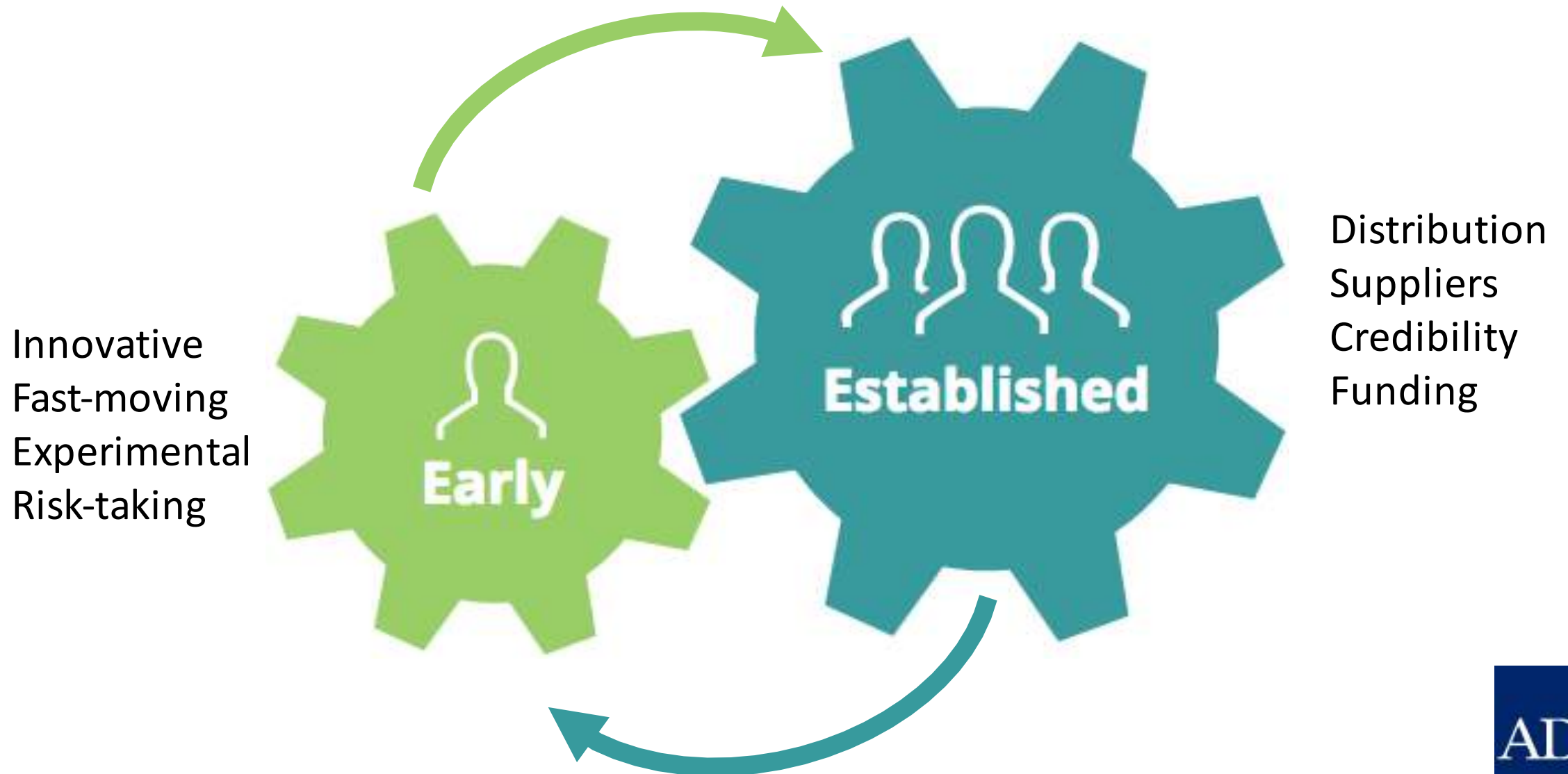
COST OF  
**SENSORS**  
(3D Lidar)

**1/300**

vs 10 years ago

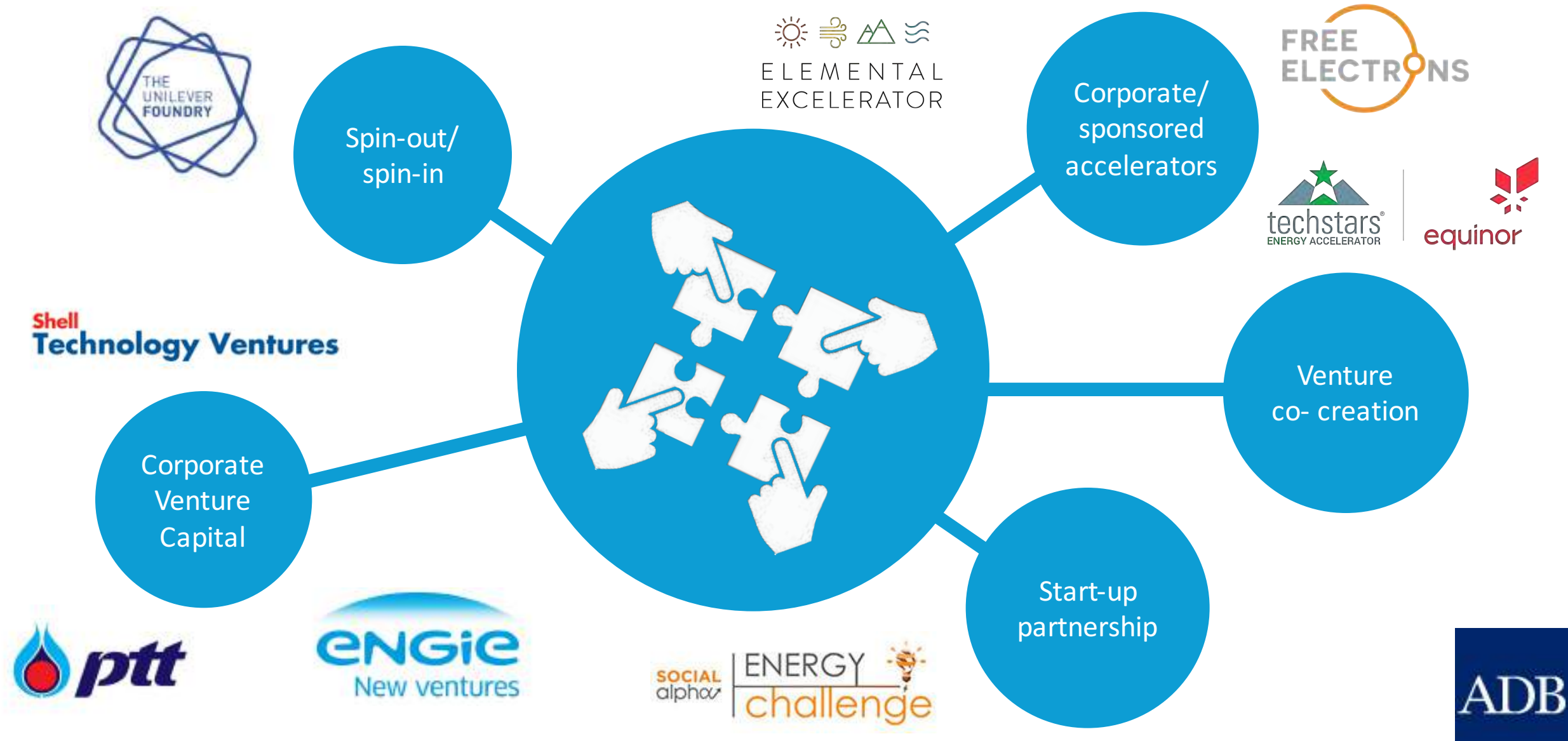
Unprecedented opportunity for new products, services  
and business models in the energy sector

# OPPORTUNITY FOR NEW COLLABORATIONS

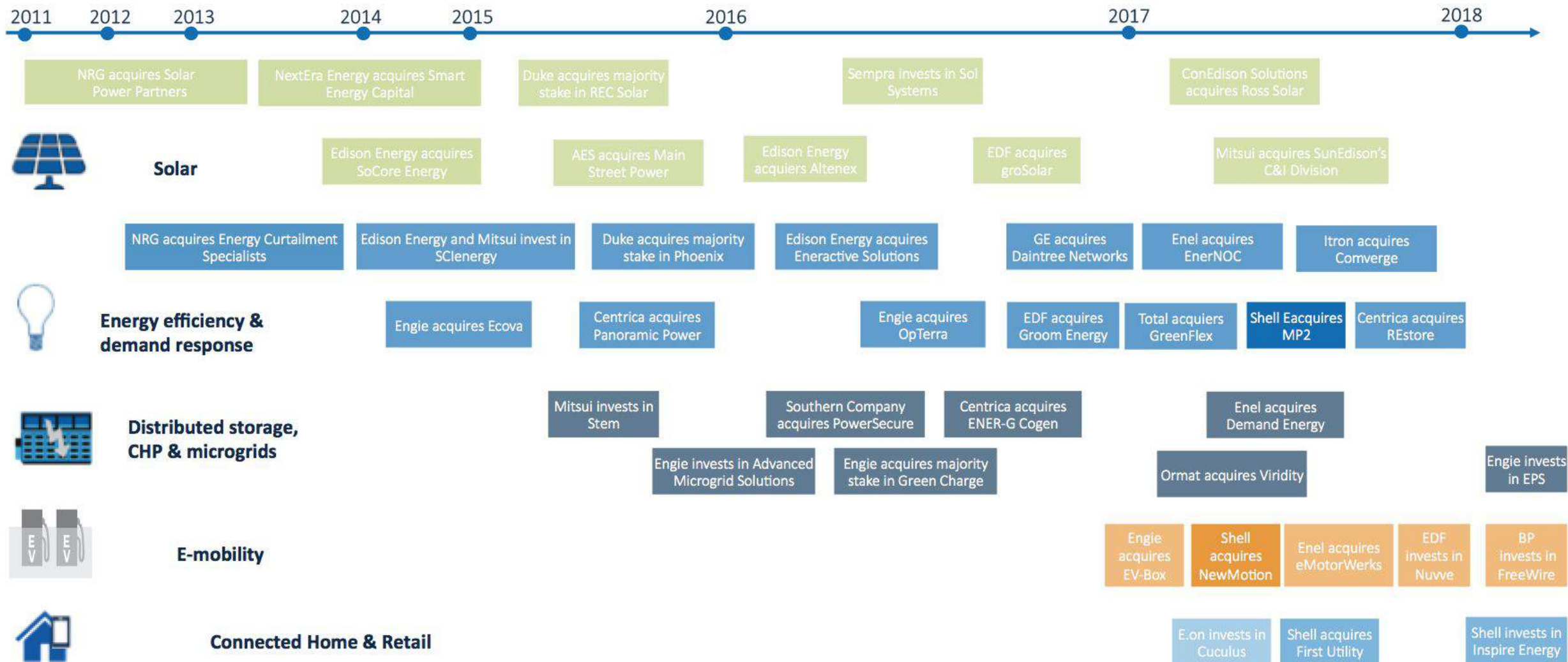




# OPPORTUNITY FOR NEW COLLABORATIONS



# RAPIDLY GROWING CORPORATE INTEREST





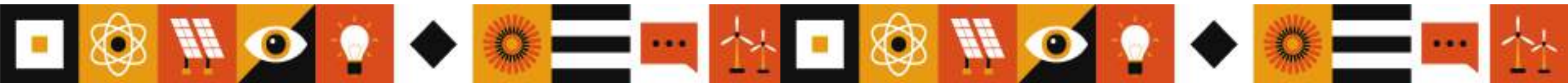
WHAT ARE THE OPPORTUNITIES AND  
CHALLENGES FOR STARTUP-CORPORATE  
COLLABORATION IN THE ENERGY  
SECTOR IN ASIA?

THANK YOU



# **Danny Kennedy**

## **Managing Director**





# **The Future of Energy and Clean Energy Innovation in California**

Presented by: Danny Kennedy, Managing Director of CalCEF

**Entrepreneurship is the engine**





**100%+** clean energy economy for the **100%**

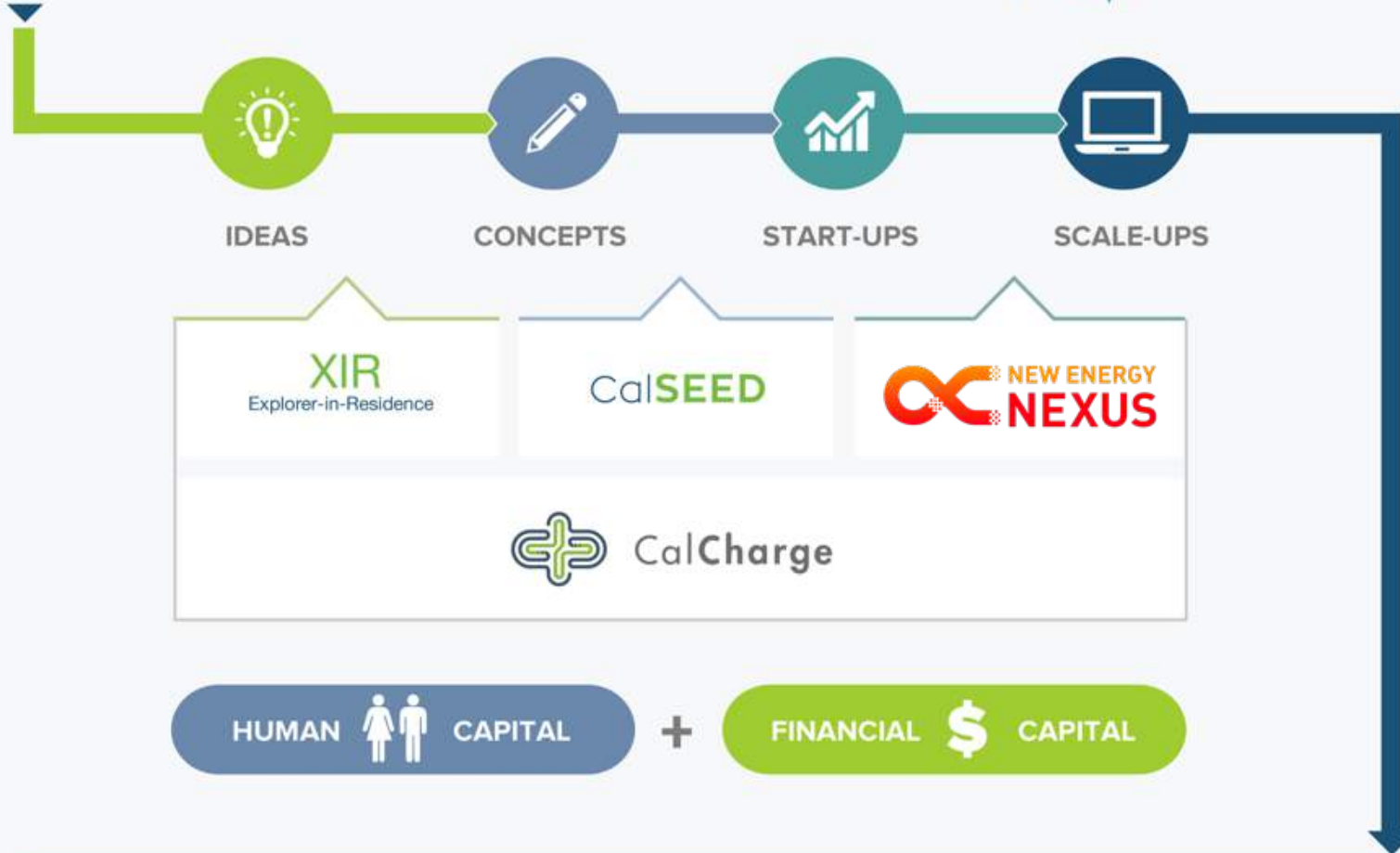
Drive  
innovation

**Support  
Entrepreneurs**  
in the clean  
energy economy

Build equitable  
outcomes



**ENTREPRENEURS:**  
the engine of growth for the energy transition.



**100%+ CLEAN ENERGY ECONOMY FOR THE 100%**

# Cal|SEED

Investing in California Energy Entrepreneurs

**\$24MM to ~100 entrepreneurs  
over 5 years**



**Quite the variety!**





CalCharge

The center of gravity for the California Energy Storage Cluster

**Accelerating the development  
of new storage technologies**



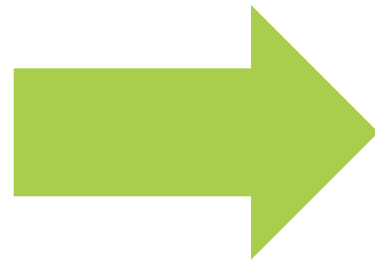
# Making batteries is a big business and becoming even bigger

Co-locate manufacturing with  
IP centers and demand

---

\$20B

---



---

\$450B+

---

Industry **today**

industry **by 2030**



## PARTNER MEMBERS



CalCharge

THE  
CENTER  
OF GRAVITY  
FOR THE  
CALIFORNIA  
ENERGY  
STORAGE  
CLUSTER

## CHARTER MEMBERS



Das Auto.



BOSCH

enovix

TOYOTA

## GENERAL MEMBERS

EAT•N

BLUE CURRENT

DRAGONFLY ENERGY

LiOx

PRIMUS POWER

DURACELL

ensar

EnZine

PARASIS

HALOTECHNICS

Saratoga Energy

MPEGLA

ITN

AE

AVALON

EDISON

Alveo Energy





Supporting and investing in

**the world's clean energy incubators  
and accelerators.**

## PIPELINE DEVELOPMENT

**Corporate and Impact Partners**

Identify need, analyze market



**Ideation**



**Pilots, Deals and Impact**



**Energy innovations and human capital**



**Program Design and Execution**



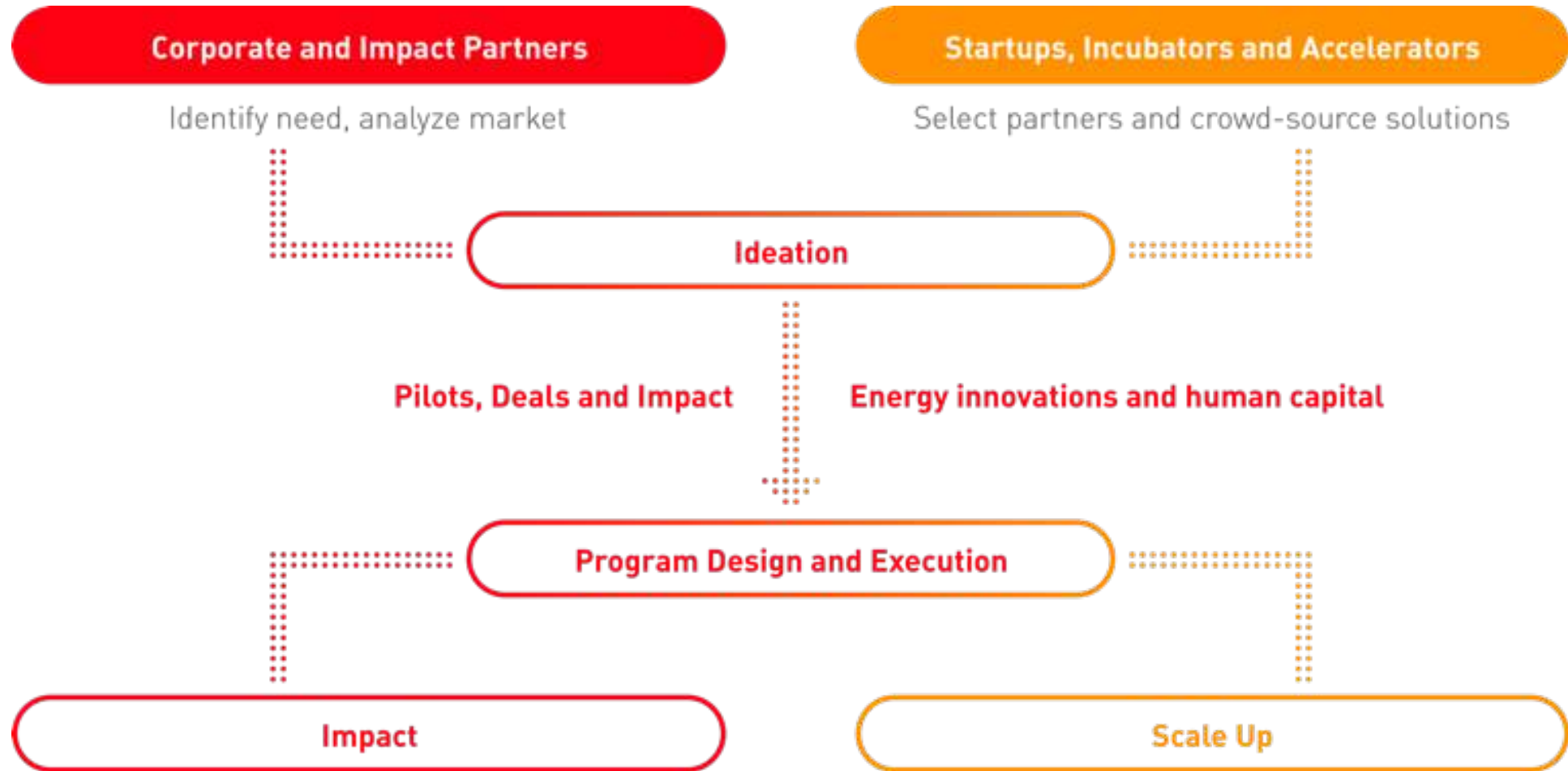
**Impact**

**Scale Up**

## KNOWLEDGE SHARING PLATFORM

**Startups, Incubators and Accelerators**

Select partners and crowd-source solutions





100,000 successful companies in 25 years through this network!

(Energy)<sup>Lab</sup>

**POWER**  
— LAB —  
Power the innovators





# PANEL DISCUSSION: CORPORATE AND STARTUP COLLABORATION

## **Christopher Comte**

Senior Vice President  
Business Development,  
Head of Renewables  
ENGIE Indonesia

## **Gavin Barfield**

Chief Technology Advisor  
MERALCO (Philippines)

## **Charlotte Wang**

CEO/Founder  
Equota Energy  
(People's Republic of China)

## **Matt Basinger**

CTO/Founder  
Electric Vine Industries  
(Indonesia)

# QUESTIONS

Why do you work with startups/entrepreneurs? What's the value and benefits? What's the opportunity?

Why do you work with corporates? What's the value and benefits? What's the opportunity?



# QUESTIONS

What are the practical challenges of working with startups?

What are the practical challenges of working with corporates?



# PRESENTATION

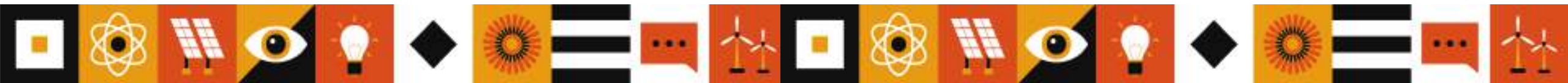
**Yi Liu**

**Deputy Director**

**Energy Internet Research Institute**

**Tsinghua University**

**(People's Republic of China)**







# **Collaborating with corporates: practical learnings**

---

**Energy Internet Research Institute  
Tsinghua University**

# Who Are We

Energy Internet Research Institute



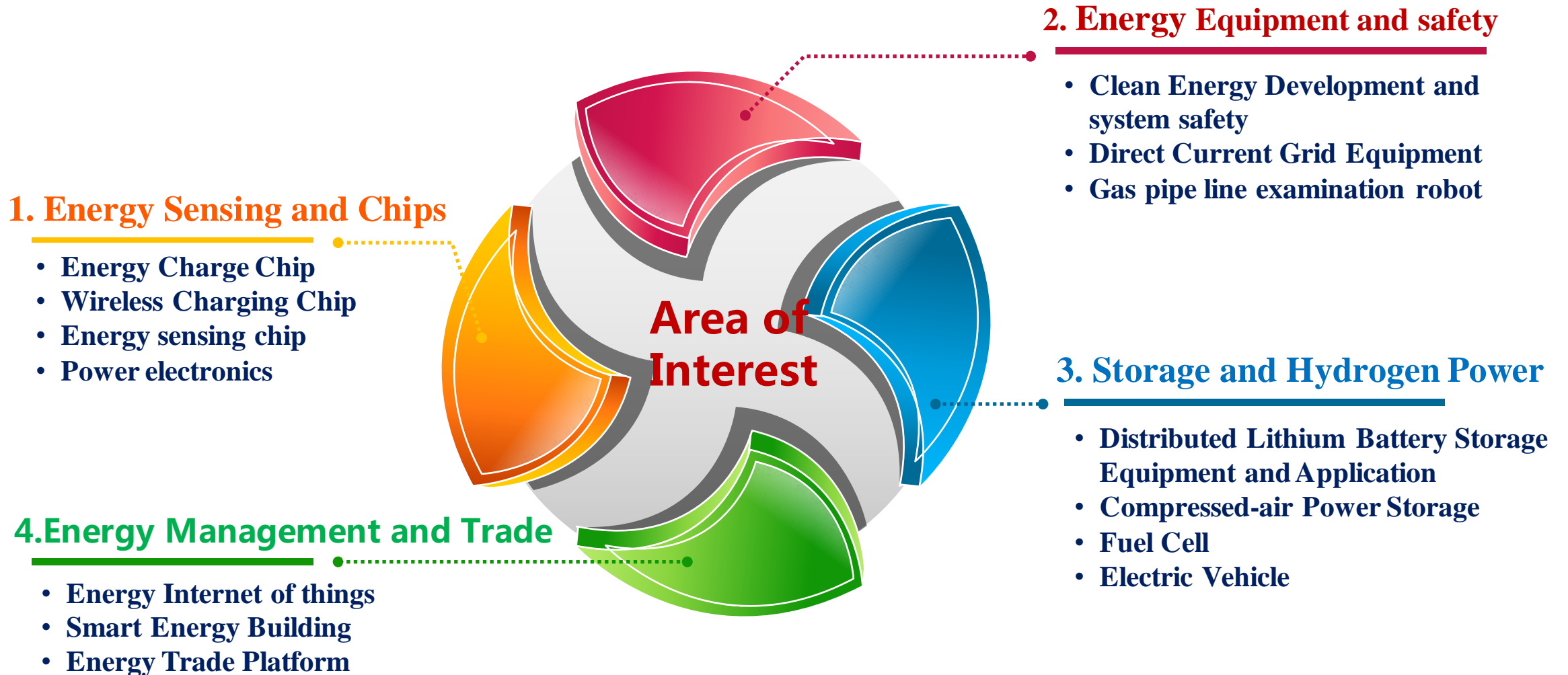
Energy  
Internet  
Research  
Institute

Gathering Talents

Incubating Start-ups

Developing New Technologies

# Areas of Interest



# Platform for collaboration



## Annual Clean Energy Technology Matchmaking

**172 Requirements from Corporates**  
**88 New Technologies Announced**



## Annual China-US '2+2' Clean Energy Forum

**Collaboration among 4 parties, Tsinghua Universities, UW, Sichuan Province and State of Washington.**



## Annual China-US Green Energy Summit

**More than 300 Clean Energy Industry Leaders Attended, including 2 Nobel prize winners and 5 academicians**



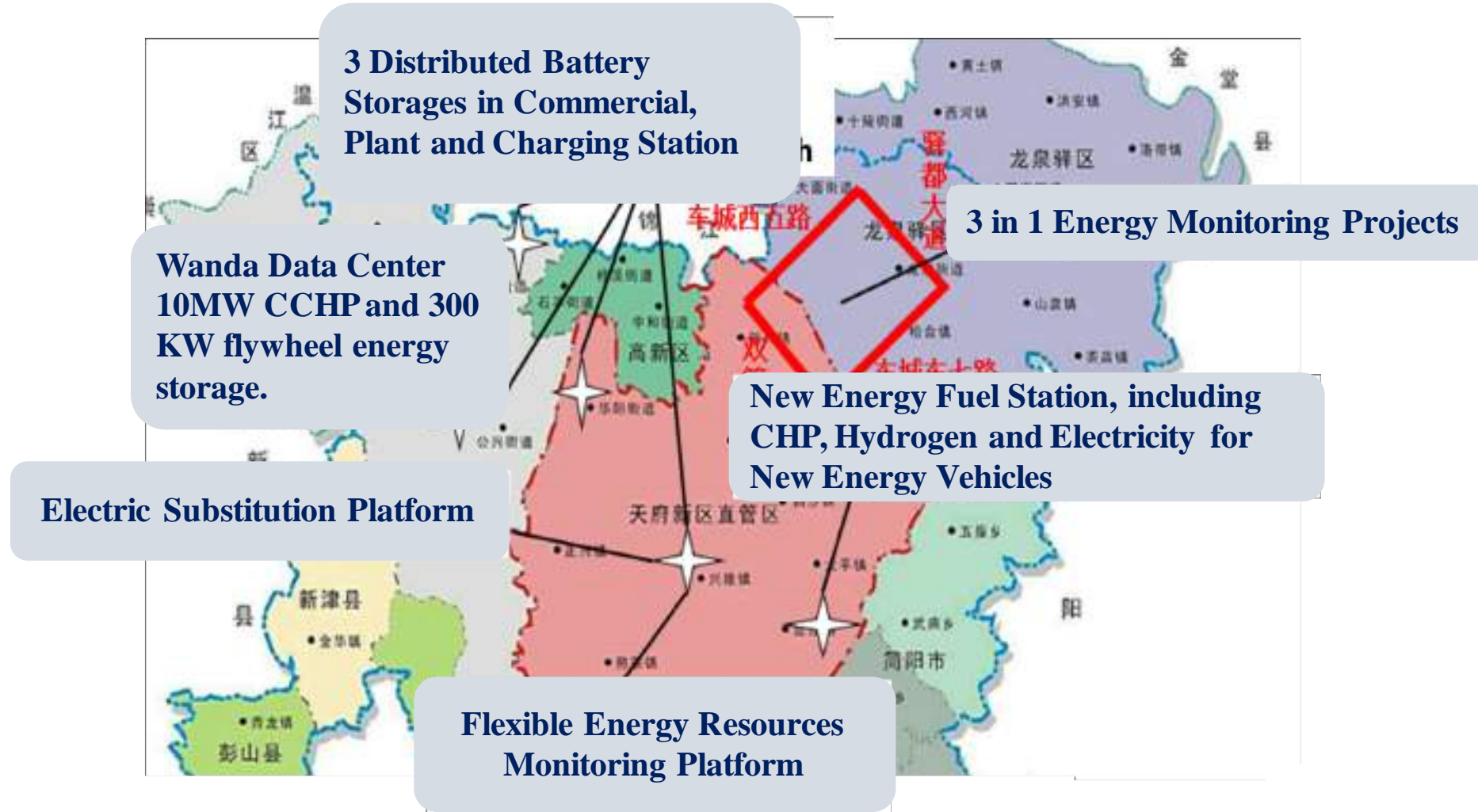
## Clean Energy Alliance

**More than 100 members, closely working with its counterpart domestic and abroad.**



# Tianfu New Area Energy Internet Pilot Project

## Flexible Energy Resources Monitoring and Management

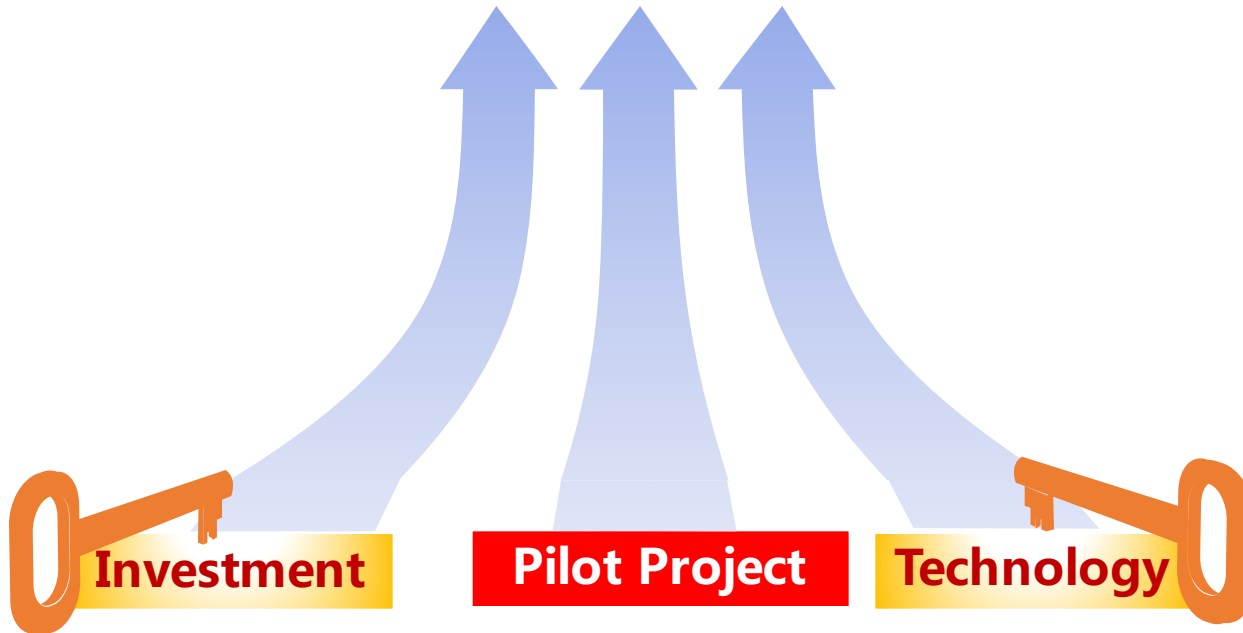


Working with 2 of the Most Important State Owned Corporations, 4 Incubatees Participate in the Project

# Incubation and Products

## Flexible Energy Resource Platform

Unicorns on the way



**14 VCs, Over 200 Million Investment, and Over 2 Billion Valuation**

**2 National Pilot Projects**  
**4 Incubatees Participating**

**Over 60 PCTS Applications**  
**1 Platform**



**The first wireless charging phone in China**

# Center for Wireless Charging and Electromagnetic Compatibility



**Dr. Fan Jun**  
**IEEE Fellow**  
**Professor of Missouri University of  
Science and Technology**  
**Director of Key Electromagnetic  
Compatibility Laboratory**  
**Chairman of the Technical Committee  
of IEEE Electromagnetic  
Compatibility Association**



**Dr. Pan Siming**  
**Researcher listed in the Thousand  
Talents Plan**  
**President of IEEE Power and Electronics,  
EMC Branch.**  
**iPhone system architect of Apple Inc.**  
**Scientist of Cisco Innovative Technology  
R & D Center**



## **EC4106**

**Compatible with three modes: WPC, Airfuel&E-Go**  
**EC4106 +BLE Chip (Optional)**  
**Output power 10w, compatible with 5V/2A charger**  
**MCU core, compatible with data expansion**  
**Compatible with intelligent inspection and switch between  
wired and wireless charging**



## **EC 4108**

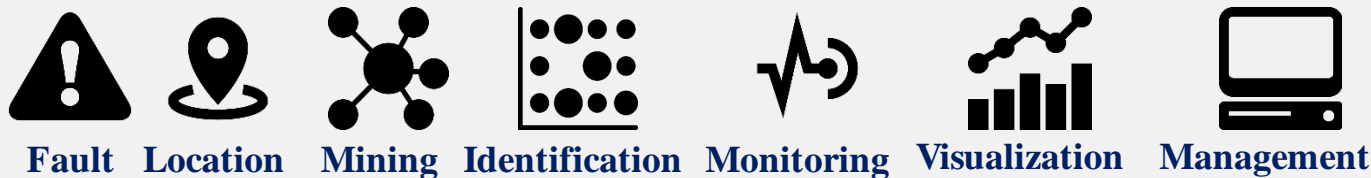
**Compatible with three modes: WPC, Airfuel&E-Go**  
**EC4108 +BLE Chip (Optional)**  
**Output power 16w, compatible with fast charging**  
**Budget data design optimization**  
**Compatible with hardware encryption and data expansion**



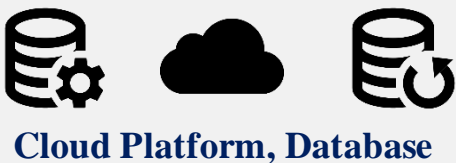


# Center for Energy Sensing and Information

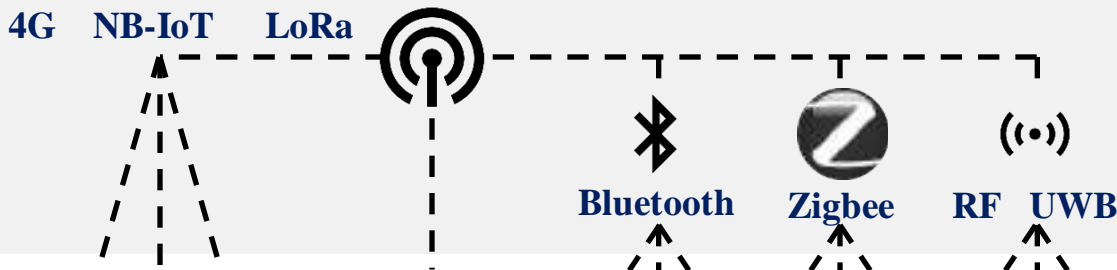
Application



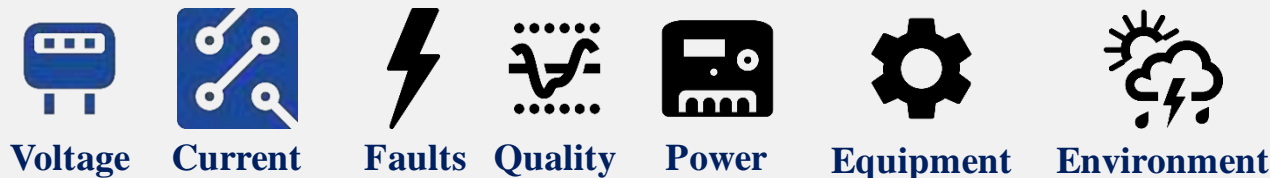
Platform



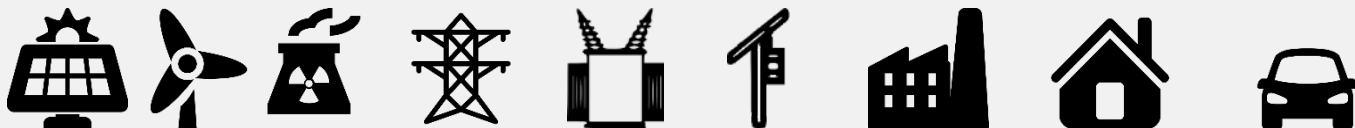
Communication



Sensor



Physical



**Tsinghua University**  
Advanced Power Transmission Technology



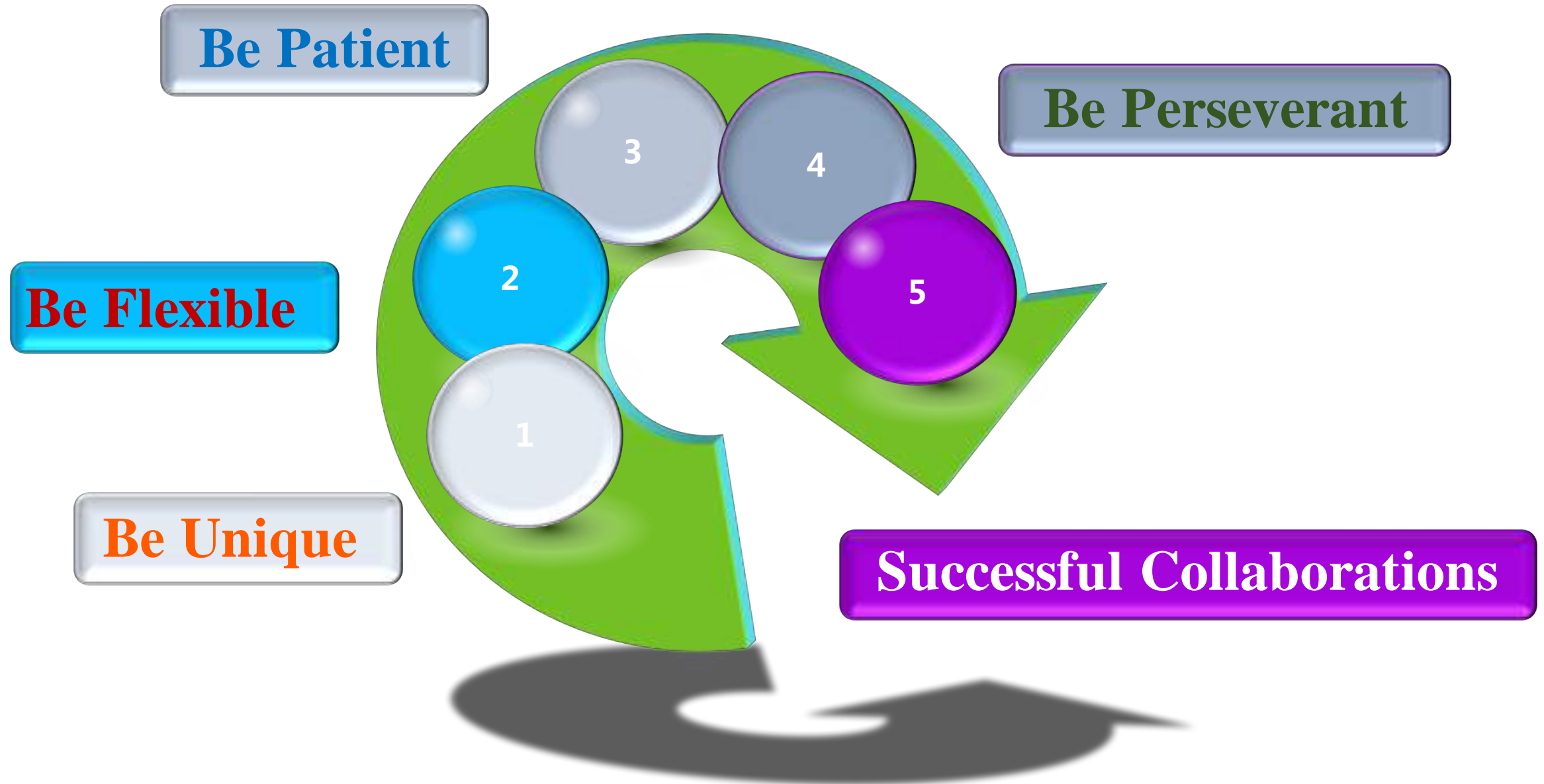
**Energy Internet Research Institute**  
Center of Energy Sensing and Information



**Stanford University**  
Stanford Center for Magnetic Nanotechnology



# Keys of successful collaboration





# **Thank You**

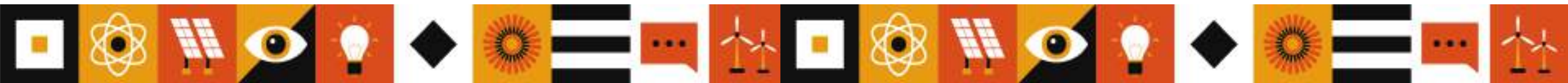
---

**Energy Internet Research Institute**

**Tsinghua University**

# PRESENTATION

**Hendrik Tiesinga**  
**Cofounder/Program Manager**  
**New Energy Nexus**  
**(United States)**







California  
Clean Energy Fund

**WE FACILITATE DEAL GENERATION  
BETWEEN CORPORATES AND DISRUPTIVE  
ENERGY STARTUPS AROUND THE WORLD.**

**New Energy Exchange is a corporate-startup matching program for disruptive energy startups from around the world. The mission is to facilitate pilot projects, commercial agreements and investments between energy companies, utilities, corporations, venture capital and innovative energy startups.**



# OUR NETWORK



THROUGH THE NEW ENERGY NEXUS NETWORK OF INCUBATORS  
AND ACCELERATORS WE PROVIDE A UNIQUE GLOBAL PIPELINE  
OF CUTTING EDGE CLEAN ENERGY STARTUPS

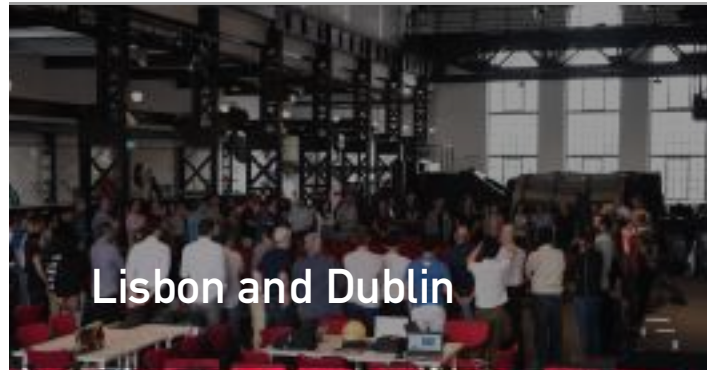
**75**

Accelerators

**29**

Countries

# PREVIOUS PROGRAM REVIEW



**453** applications from **52** countries  
**46** commercial opportunities  
**17** signed agreements valued at **\$1.7m**

(potential to reach \$12.1m in 12 months)

FREE  
ELECTRONS **2017**

# FINDING THE PERFECT MATCH



**01**

## Identify Needs

Work with our team to determine your organization's innovation and technology needs and goals.



**02**

## Join the Program

Join other energy companies and utilities whom share the same goals which gives you the rare opportunity to collaborate.



**03**

## Call for Applications

New Energy Nexus recruits startups to apply during 2-month outreach from their existing global network of 100+ accelerators and pipeline partners and over 500 startups.



**06**

## Deal Signed

Getting deals done is the goal. Our program approach is an effective and efficient way of enabling deals to happen.



**05**

## Program Execution

3 highly engaging match and deal making workshops, beginning and starting in Silicon Valley.

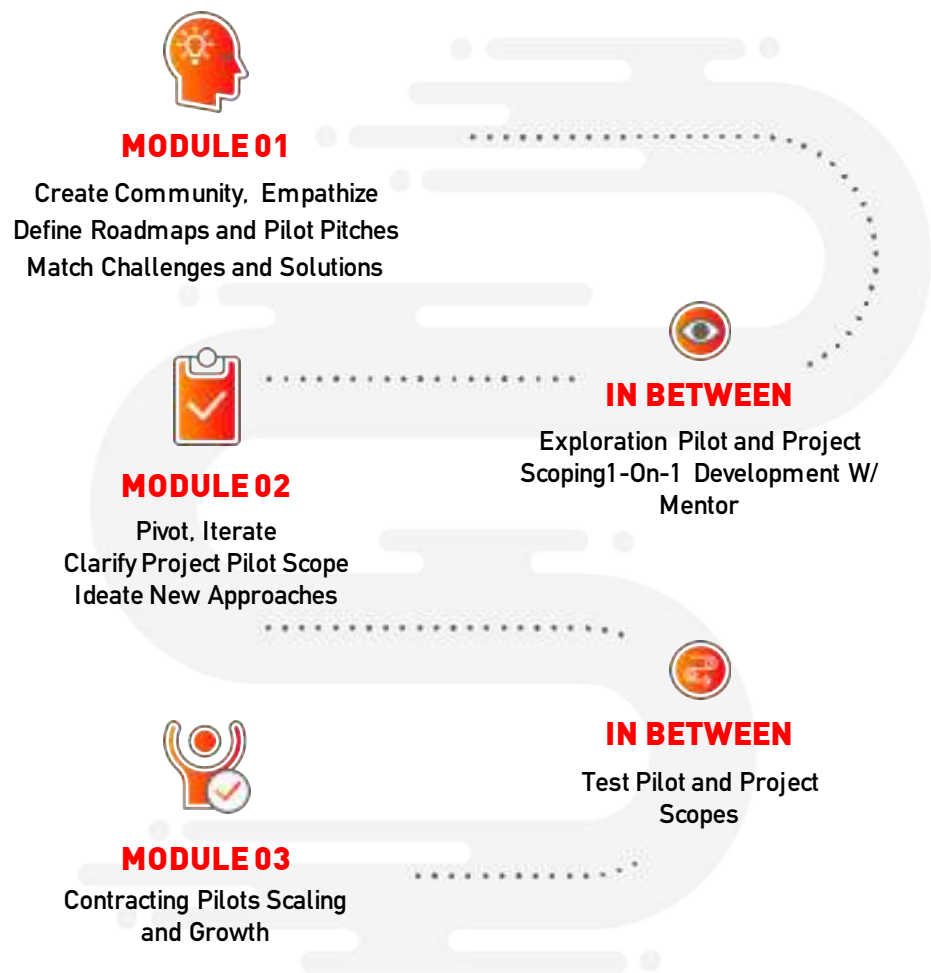


**04**

## Due Diligence and Selection

Expected 200+ applicants. 1—20 startups will be selected by the participating companies following a comprehensive due diligence process.

# PROGRAM JOURNEY



“ We’re replacing hundreds of hours of duplicative work with one streamlined program. We expected to prove the value of the program with dealflow, but the peer-to-peer learning and co-investing really came out as just as important to our utility partners. Most importantly, we are excited about taking the most successful corporate-startup program in the world and opening it up to others.



Hendrik Tiesinga  
Co-Founder  
New Energy Nexus



# TECHNOLOGY CATEGORIES



Clean Energy



Smart Grid



Energy Efficiency



Energy Management



Customer Experience



E-Mobility



Business Model Innovation



IOT and Digitization



Energy Access



Block Chain

# HOW WE CAN HELP



## Peer Learning

Learn energy innovation from leading VC and innovation peers from around the world. Peer learning stood out as one of the key advantages in our previous programs.



## Sector-Diversity

A non-exclusive approach to signing deals and commercial agreements. For example, in our previous program one utility signed deals with multiple startups. This approach allows more deal flow to happen effectively allowing you to get more 'bang for your buck.'



## Technology Trends

Immerse in new technology trends through close collaboration with startups and other energy companies.



## Deal Flow

Recruit startups from various sectors including: clean energy generation, smart grid, energy efficiency and management, IoT and digitization, energy access and e-mobility. Corporate participants can provide preferences for sub sectors ahead of the start of the program.

A photograph of a wind farm at sunset. The sky is a deep orange-red, and the ground is a field of low-lying vegetation. Several wind turbines are visible, with the largest one on the left. The text "COFFEE BREAK" is overlaid in the center.

**COFFEE BREAK**

## **BREAKOUT SESSION:**

### **How can we grow corporate-startup collaboration in Asia?**

What are the barriers for corporates and startups in Asia to work together?

How do we address these issues?

What is the role of other stakeholders?



# WRAP UP

Challenges?

Support?

Corporates to work with

What you can do next?



A photograph of a wind farm at sunset. The sky is a deep orange-red, and the ground is covered in low-lying vegetation. Several wind turbines are visible, with the largest one on the left. The word "CLOSING" is written in white, bold, sans-serif capital letters in the center of the image.

**CLOSING**



A photograph of a wind farm at sunset. The sky is a deep orange-red, and the ground is covered in low-lying vegetation. Several wind turbines are visible, with the largest one in the foreground on the left. The text "POWER ON" is centered in the image.

**POWER ON**