



DRAFT AS OF OCT 2015

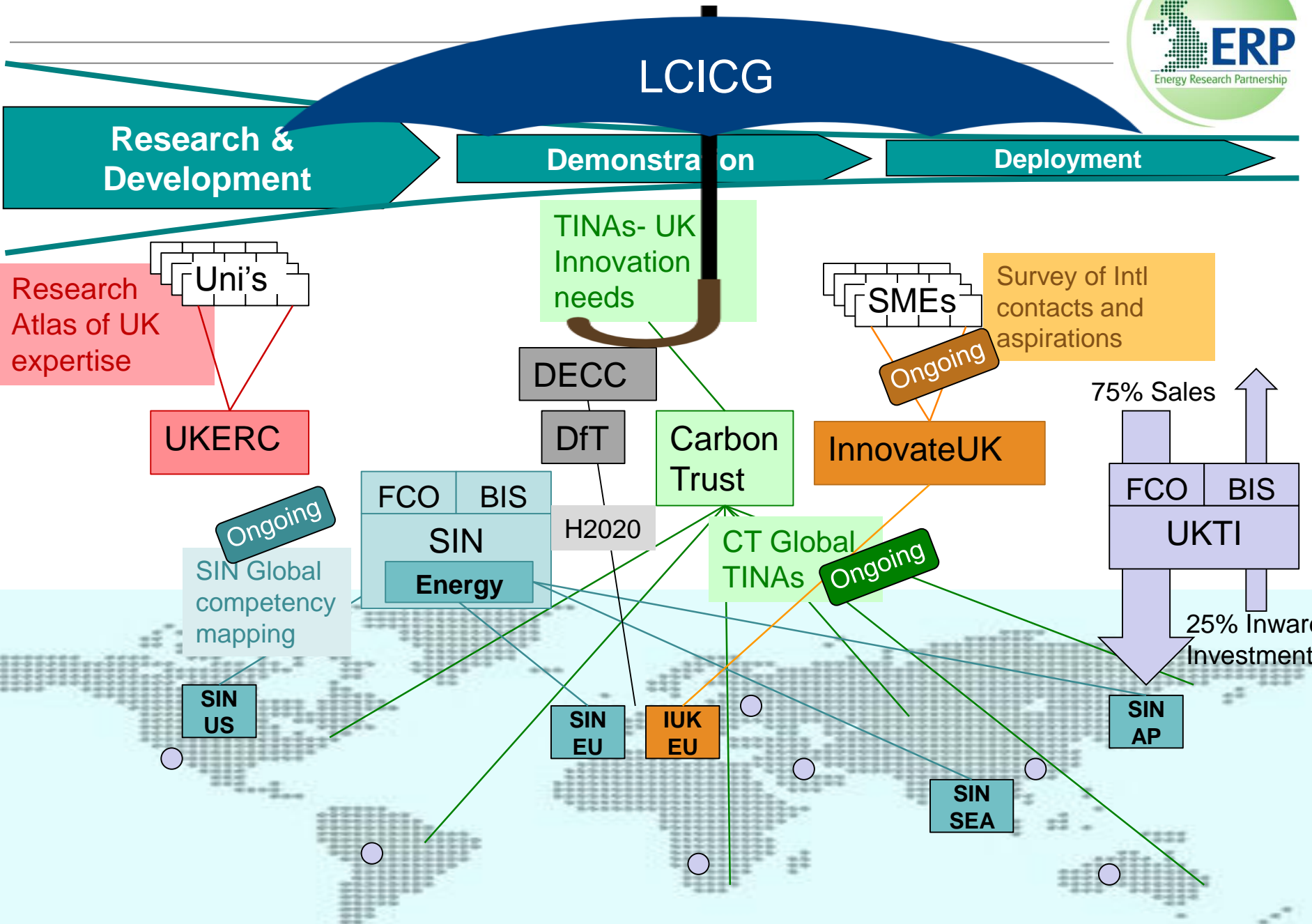
# International Engagement

October 2015

Andy Boston

# International Engagement Activities

Draft as of Oct 2015



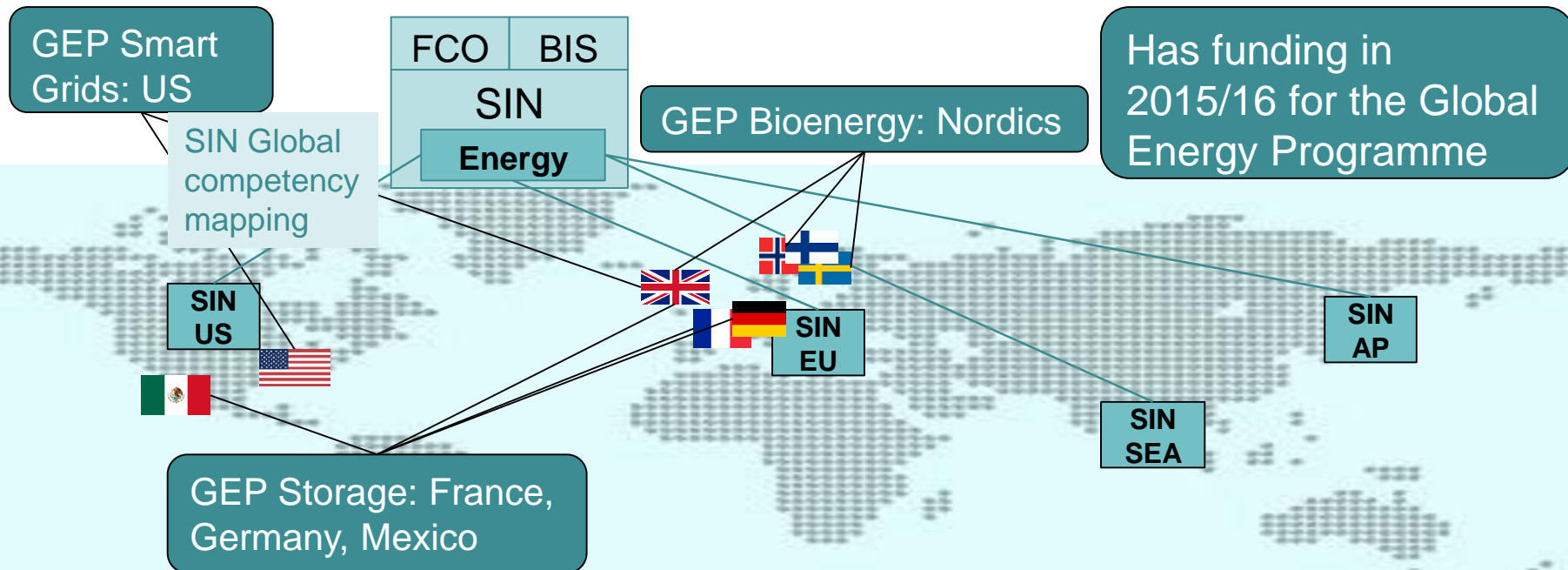


Research & Development

Demonstration

Deployment

- Reports to Foreign Office and Business Innovation and Skills
- Main focus is science and R&D across all disciplines
- Will facilitate any public body's engagement activities
- >90 people "on the ground", 4 specialists in energy
- Doing an energy Global Competency Mapping exercise



# International Engagement Activities

Draft as of Oct 2015



## LCICG

Research & Development

Demonstration

Deployment

Research Atlas of UK expertise

Uni's

UKERC

TINAs- UK Innovation needs

DECC

DfT

SMEs

Survey of Intl contacts and aspirations

Ongoing

InnovateUK

Carbon Trust

75% Sales

FCO BIS UKTI

25% Inward Investment

Ongoing

SIN Global competency mapping

FCO BIS SIN Energy

H2020

CT Global TINAs

Ongoing

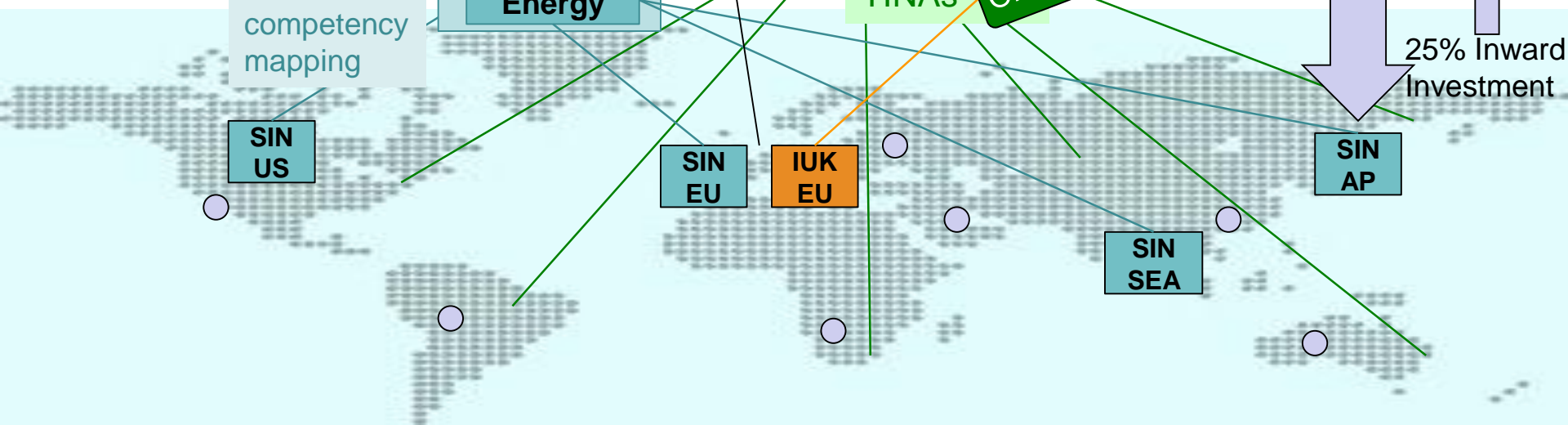
SIN US

SIN EU

IUK EU

SIN SEA

SIN AP





## LCICG



- CT has been active on behalf of the LCICG: Technology Innovation Needs Assessments. A key input to any strategy
- Now working for FCO/DECC on Global TINAs – soon to be renamed as not really TINAs

TINAs- UK Innovation needs

Carbon Trust

CT Global TINAs

Report in time for COP 21

Solutions to gaps

- “Global TINA” has 3 strands
- Survey collaboration initiatives (e.g. IEA Implementing agreements)
  - Opportunities and barriers for international collaboration
  - Gap analysis

20 techs, 196 countries, 4 sectors

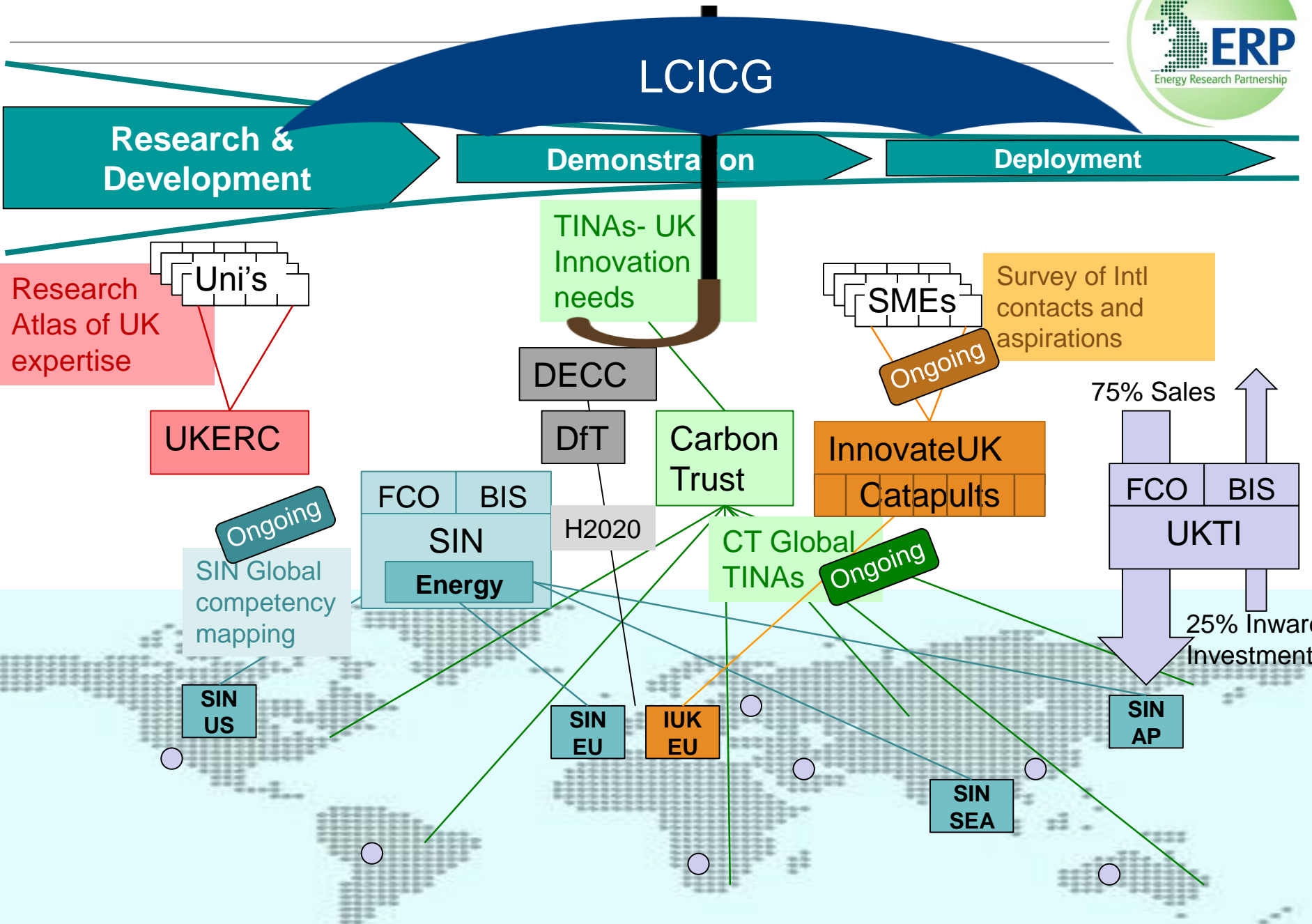
CCS*	Mat	R&D	Man	O&M
Egypt	1	2	3	1
Fin	5	6	7	4
Grc	1	4	4	2
Haiti	1	2	1	1

\*Totally random scores for illustration



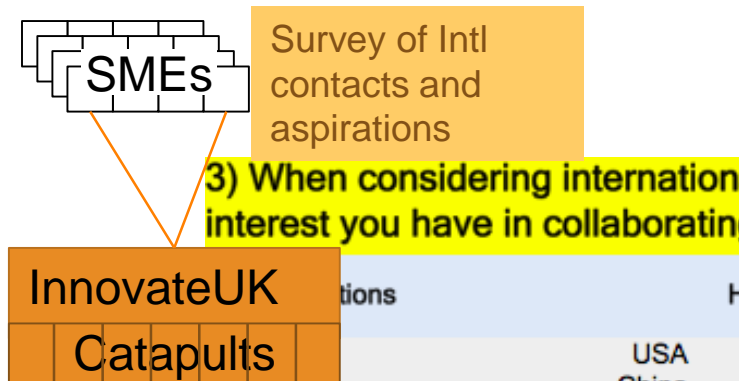
# International Engagement Activities

Draft as of Oct 2015





- Innovate UK created Catapults which will engage internationally
- IUK administer Newton Fund – funds R&D in developing economies
- Co-funding work in EU, US and Canada



3) When considering international interest you have in collaborating...



11) How likely is your organisation to use the following methods to find international partners?

Answer Options

- UKTI
- Innovate UK
- Knowledge Transfer Network (KTN)
- Enterprise Europe Network (EEN)
- National Contact Points (NCP)
- York (SIN)
- research
- Patent databases
- National & international trade shows & conferences
- National & international trade press
- General web search

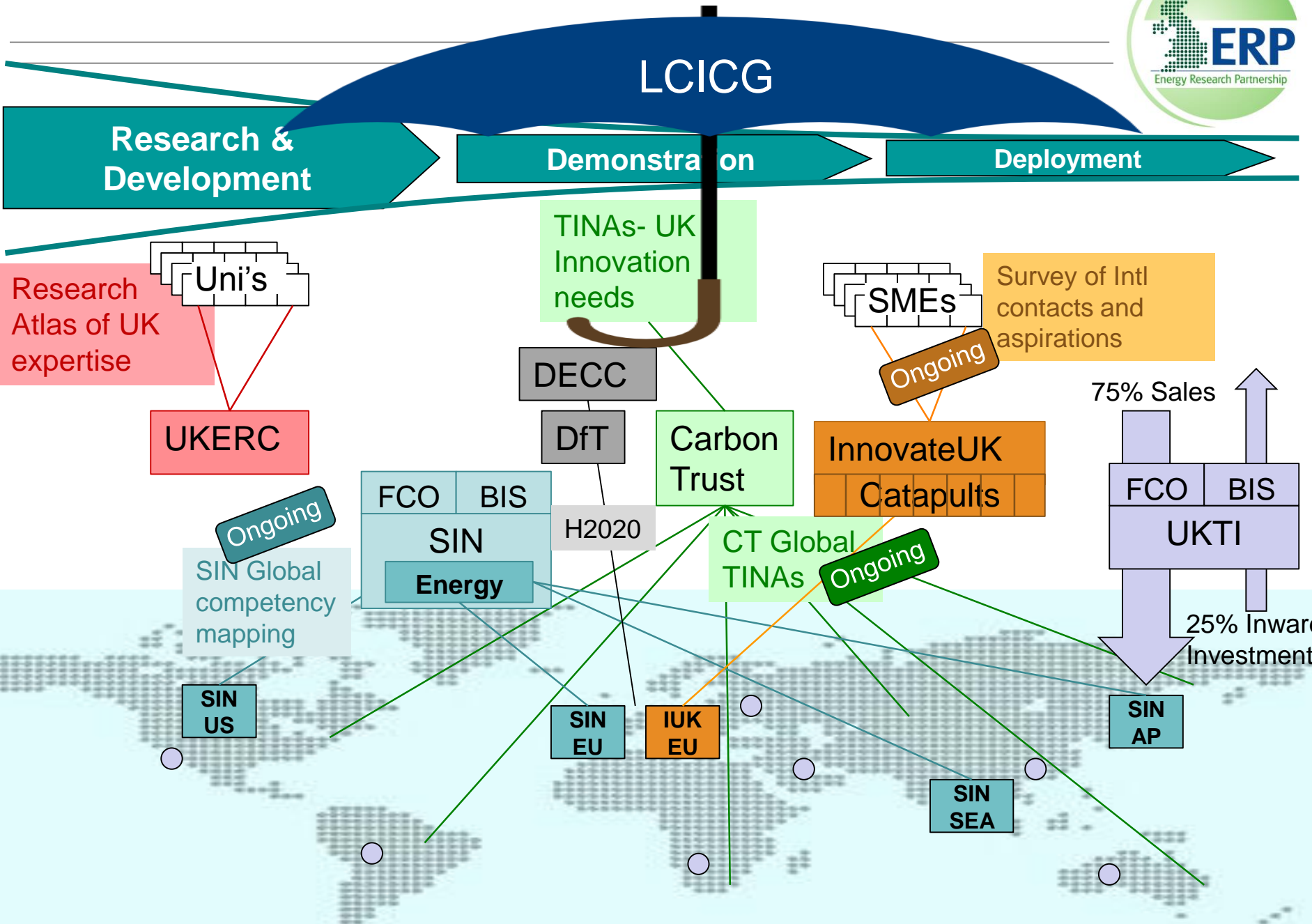
USA, China, India, Canada, Japan, South Africa, Australia, Chile, Brazil, Singapore, Malaysia, South Korea, Mexico, Philippines, Indonesia, Thailand, Taiwan, Turkey, Vietnam, Egypt

IUK EU

Newton Fund

# International Engagement Activities

Draft as of Oct 2015







- Strong involvement in EU, shaping Horizon 2020 and maximising benefit to UK
- Chairs IEA governing board & vice chair to committee

- DECC & IUK have driven activity in LCICG to bring co-ordination to all of this

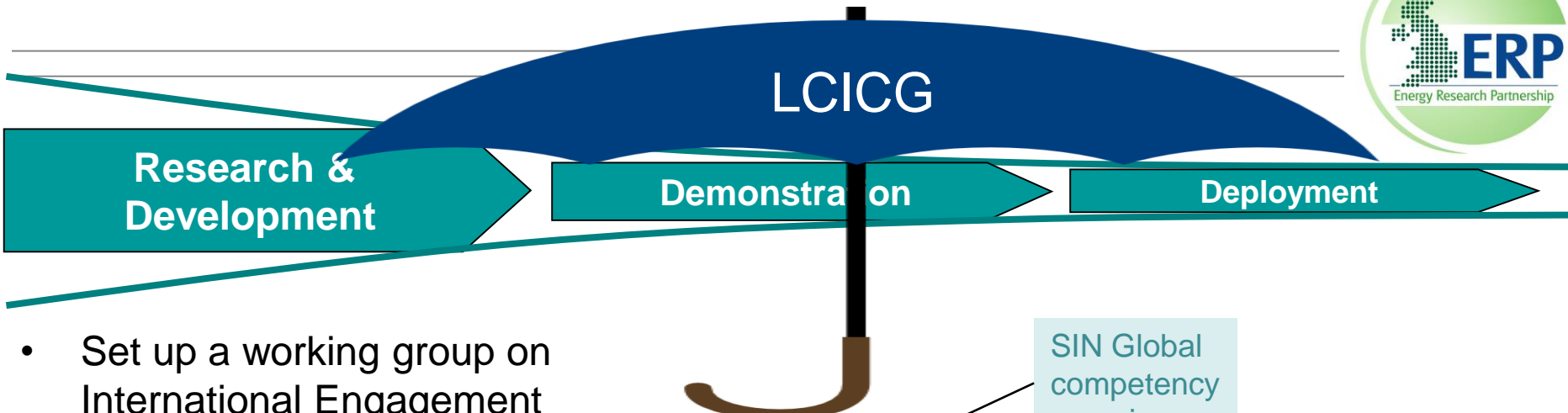
InnovateUK

DECC

H2020

IEA





- Set up a working group on International Engagement
- 3 workshops aiming to lay down an initial strategy by region
  - EU
  - High value/ high growth
  - Developing (Newton)

SIN Global competency mapping

Innovate UK survey The text 'SMEs' is written inside a white rectangular box with a black border, which is part of a stack of three such boxes.

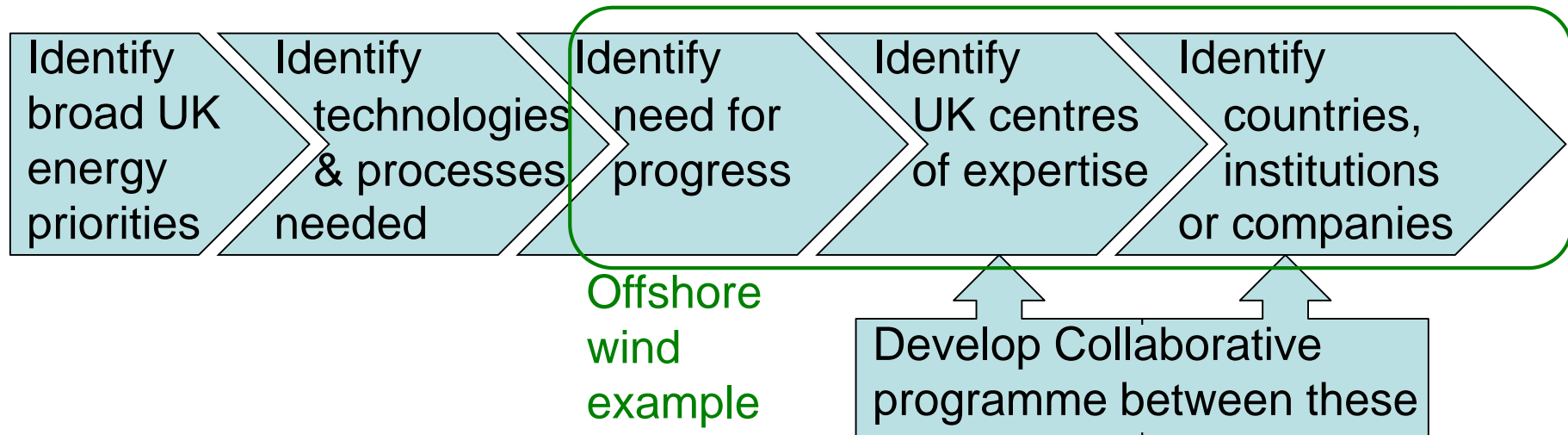
CT Global TINAs



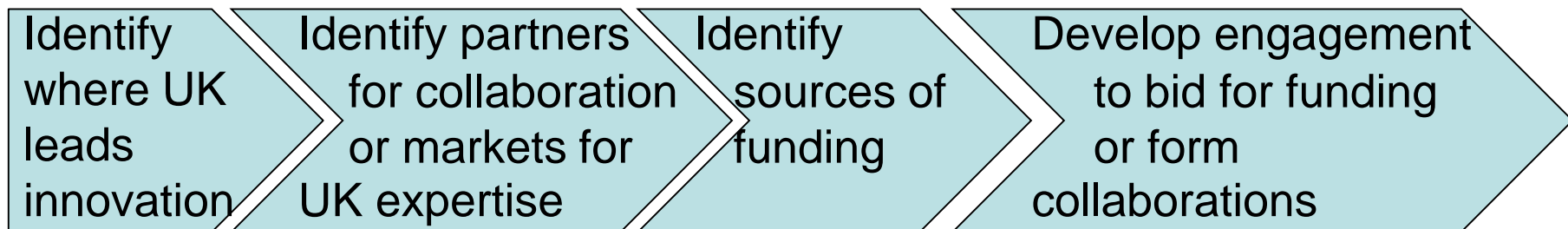
# Developing a Strategy Draft as of Oct 2015



## 1) UK needs help meeting energy objectives



## 2) UK leading



# Example Strategy for Offshore Wind Draft as of Oct 2015

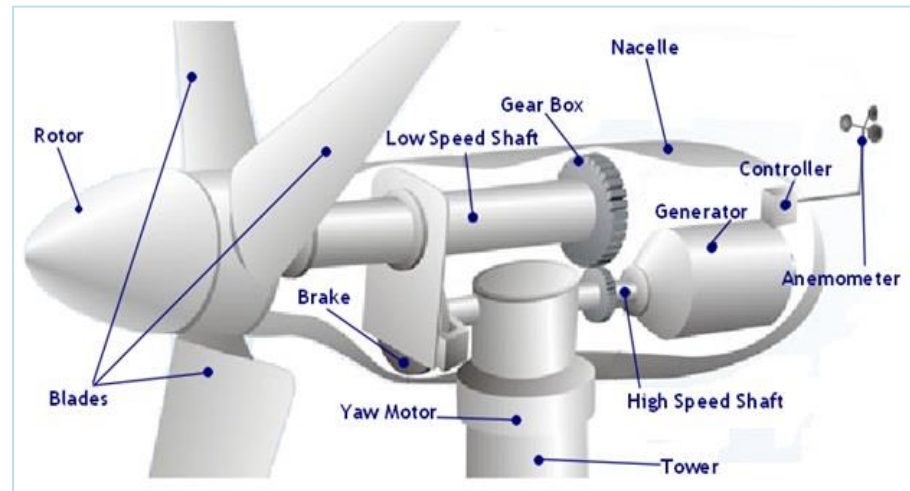





This is an example of detail required, it is incomplete and not intended to be a final strategy

Let's assume Offshore Wind is an important technology for UK

Consider components

- Identify gaps
- Identify UK expertise
- Identify external expertise



Offshore Wind Component*	Countries / Companies with Expertise		Type of Expertise**	Type of Engagement Opportunity	Notes
Rotor					
Magnets		UK	Research / Development	Leadership Op	Sheffield – eliminating permanent magnet materials
Floating Foundations		Norway	Development Demonstration	Learn/ collaborate	<u>Hywind</u> / Statoil developed since 2009
O&M		UK	Deployment	UK Leadership	Offshore experience from Oil & Gas Industry

# Example Strategy for Offshore Wind

Draft as of Oct 2015



The strategy may for example say:

- “There’s a need to reduce import dependency on rare earth magnets from China to improve security of supply. To achieve this there will be:
  - Support for world leading work in UK on alternative materials
  - Collaboration with GE on transferring superconducting magnet expertise from medical scanners to generation technology”
- “There’s a need to develop low cost floating platforms for 30-100m depth. To achieve this there will be
  - Strong support for joint development and demonstration of Hywind platform with Statoil
  - Seek to get involved in Alstom 6MW array testing at Cherbourg”







- Use **energy storage** as a second example
- Look for more **examples** of how international strategy has been done well e.g. The UKTI Life Sciences Organisation
- **Estimate the resource** required to deliver an engagement strategy and to keep it a ‘live document’
- **Propose how a strategy could be implemented** and state how the strategy may be used
- Continue to **work with and support the LCICIG** and its member organisations, and be a participant on the LCICIG’s International Engagement Working Group
- Deliver **final recommendations for approval at the January 2016 plenary**



Too early to be definitive but may include:

- A living strategy document should be produced and maintained
  - to identify engagement priorities *per technology* at component level
  - to locate expertise
  - to identify countries that should be a priority for engagement
- A structure and a funding source should be identified to ensure longevity of this document

*The document may in fact be an interactive website tool or online database (the exact format is unclear at this stage, but the further work should help determine the overall structure.)*