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Creating the Supply Chain of the Future.

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Advanced Resource Efficiency Centre

Collaborative Steering Group Briefing

October 2014

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Partners and Participants' Organisations

The University of Sheffield AMRC with Boeing
Rolls-Royce Tata Steel Unilever Panalpina
Mineral Metals Trade Association
The Institute of Materials, Minerals and Mining
KTN – Innovate UK Costain Skanska
AQUA Ltd Sheffield City Region LEP Severn Trent
DLA Piper PA Consulting Group Briga Consulting
Emelo Consulting FWA Consulting
Recovery Insulation Ltd CLCF Tecnalia SEERC
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R&IS, Partnership and 2022 Futures

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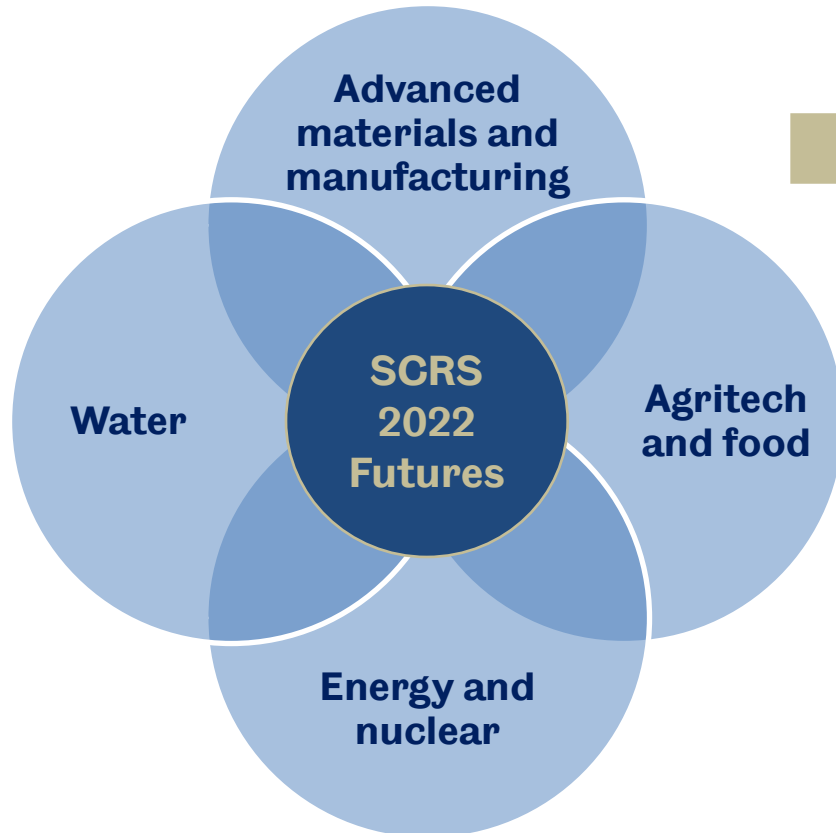
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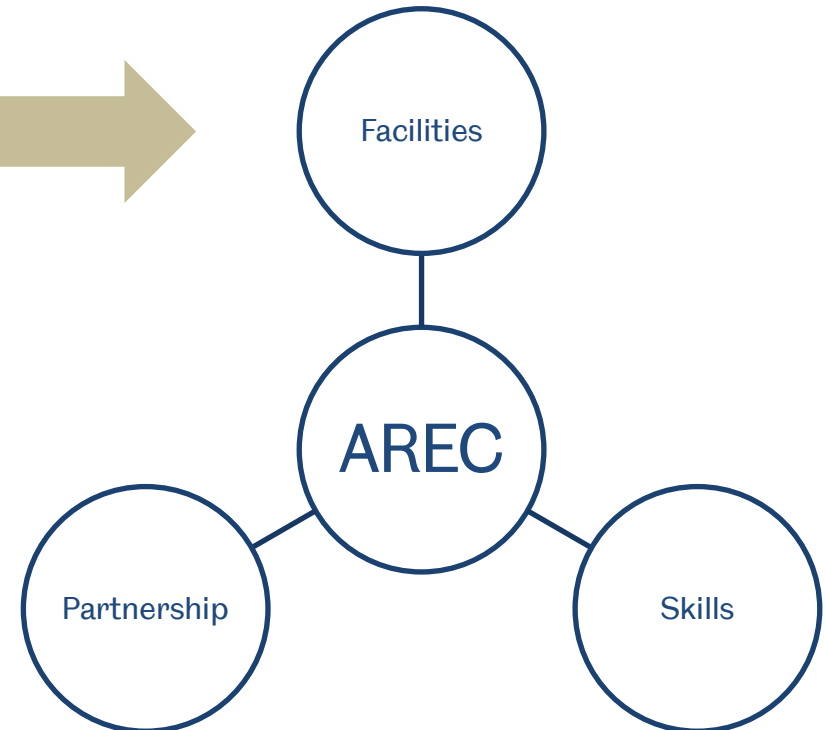


We need to build joint capability that is world leading and focus on our strengths

Supply Chain Resource Sustainability (SCRS)



Advanced Resource Efficiency Centre (AREC)





www.sheffield.ac.uk/arec

October 2014

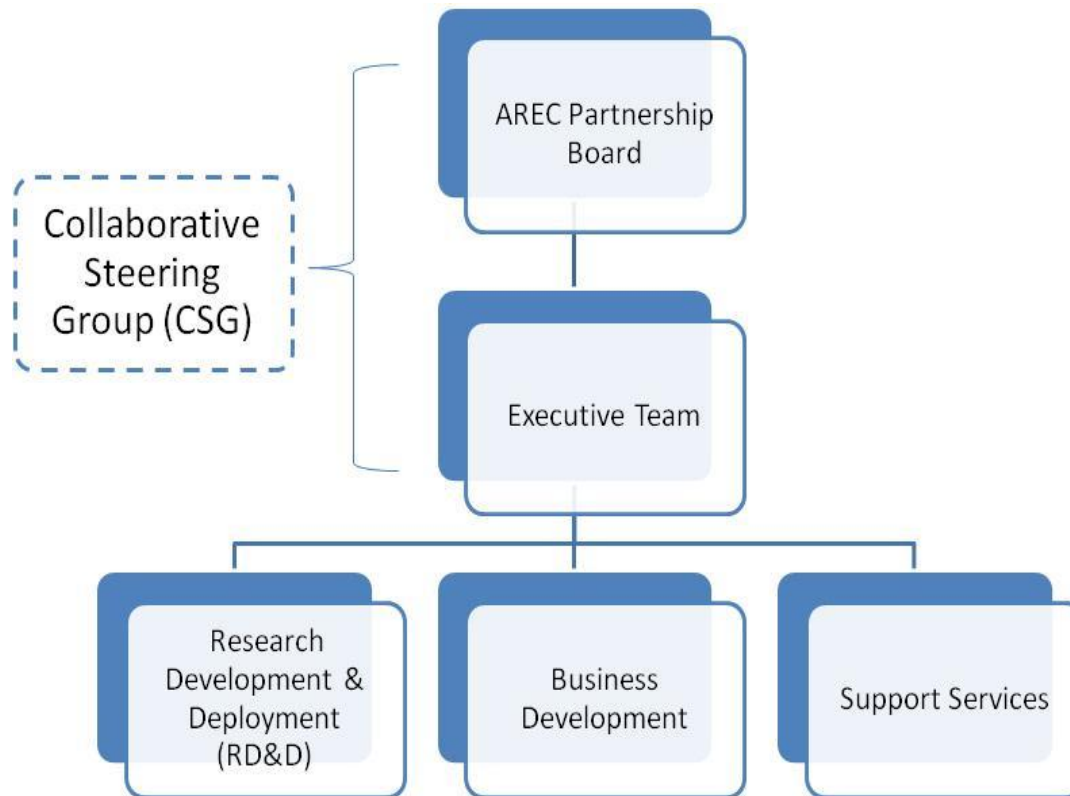
- Set up Collaborative Steering Group meetings to develop project matrix

January 2015

- Prepare and issue business case for approval from key stakeholders.
- Series of proposals from key partners to raise funding and generate contributions



AREC Governance



Role of AREC CSG members

- Steer the development and growth of the AREC
- Promote the AREC and its services
- Obtain and commit resources and support to the AREC

See Terms of Reference

Mission and Vision

- **Mission**

To create a world leading supply chain resource efficiency and sustainability infrastructure addressing critical resource existentiality and challenges using a combination of method, tool, model, technology, process and system.

- **Vision**

To reengineer future supply chains by integrating supply chain resource efficiency and sustainability into strategic decision making in government, industry and education for improved competitiveness internationally.

Strategic Objectives

1. To build partnership and collaborative approach addressing world biggest challenges of resource existentiality.
2. To focus research and innovation on the supply chain of the world essential resources especially in advanced materials/manufacturing, energy and nuclear, water, agritech/food.
3. To connect lower and higher TRL activities accelerating maximum impact of supply chain resource efficiency and sustainability to users and society.
4. To sustain pipeline of relevant skills ensuring future supply chain resource efficiency and sustainability.

The resources we already have



20
Partnerships/
Industry leaders

40 Research
Centres



20 leaders
(academic leads,
BDM leads,
partnership
leads and 2022
Futures leads)



The resources we need

Time

- Commitment from key partners in kind – time from sponsors, access to data and facilities, and participation in AREC

Projects

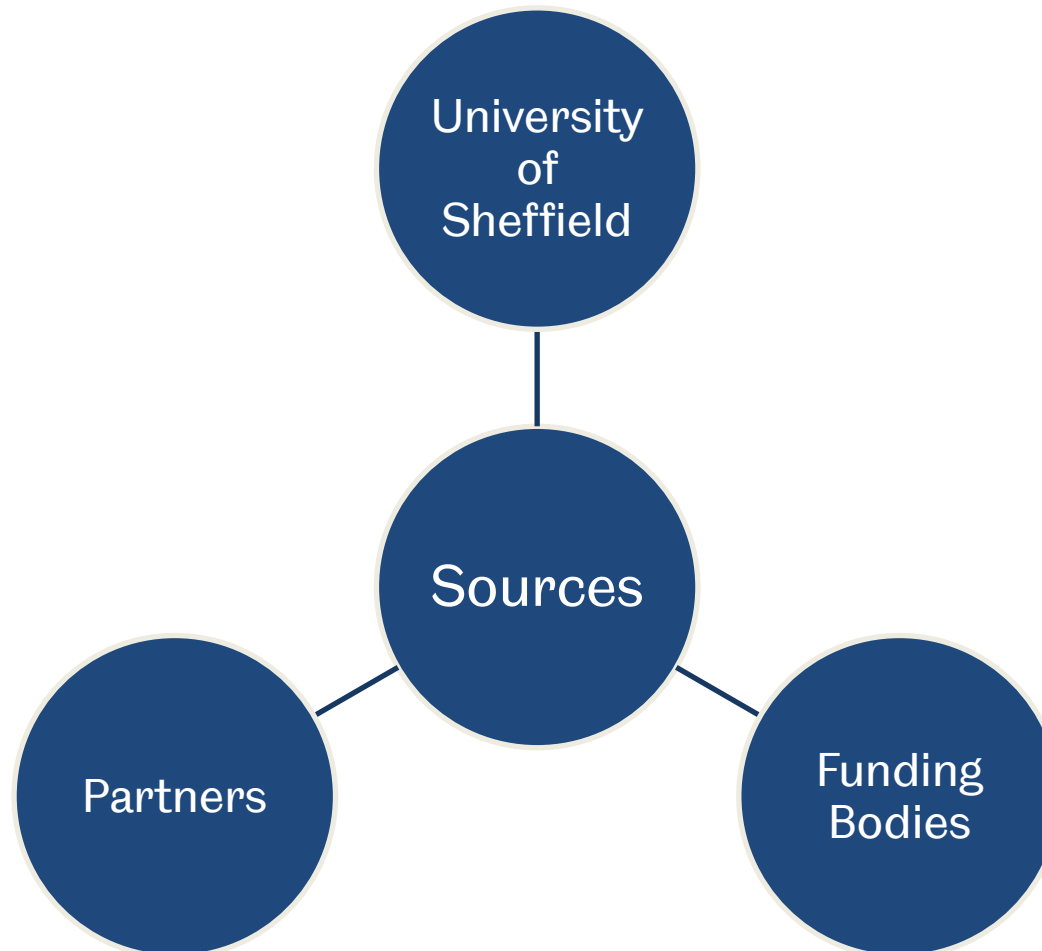
- Contribution to the development of project opportunities matrix and activities

Investment

- We will reach our goal through matched funding – every sum raised will be leveraged to create 3 x value

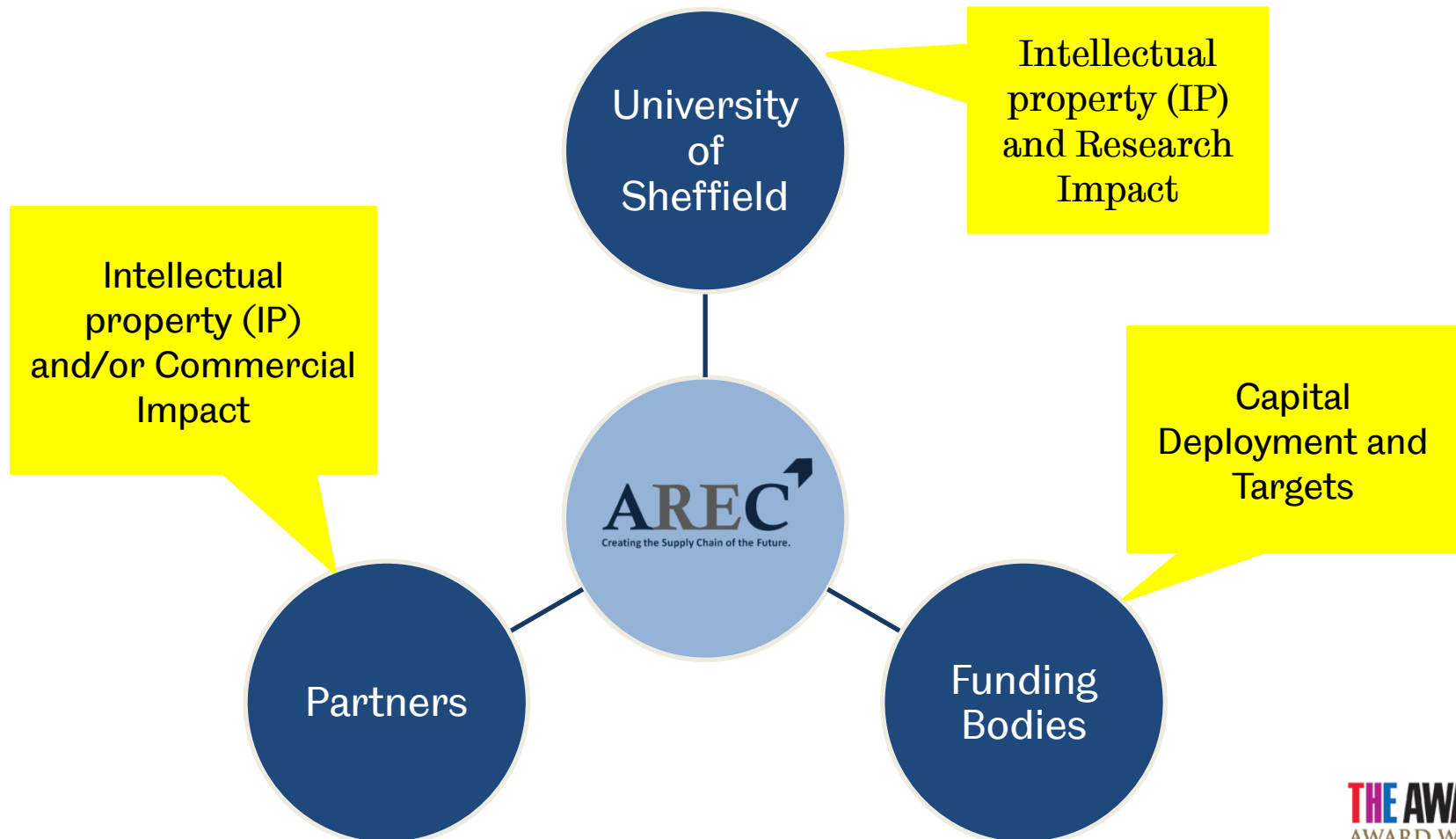


Sources of resource investment



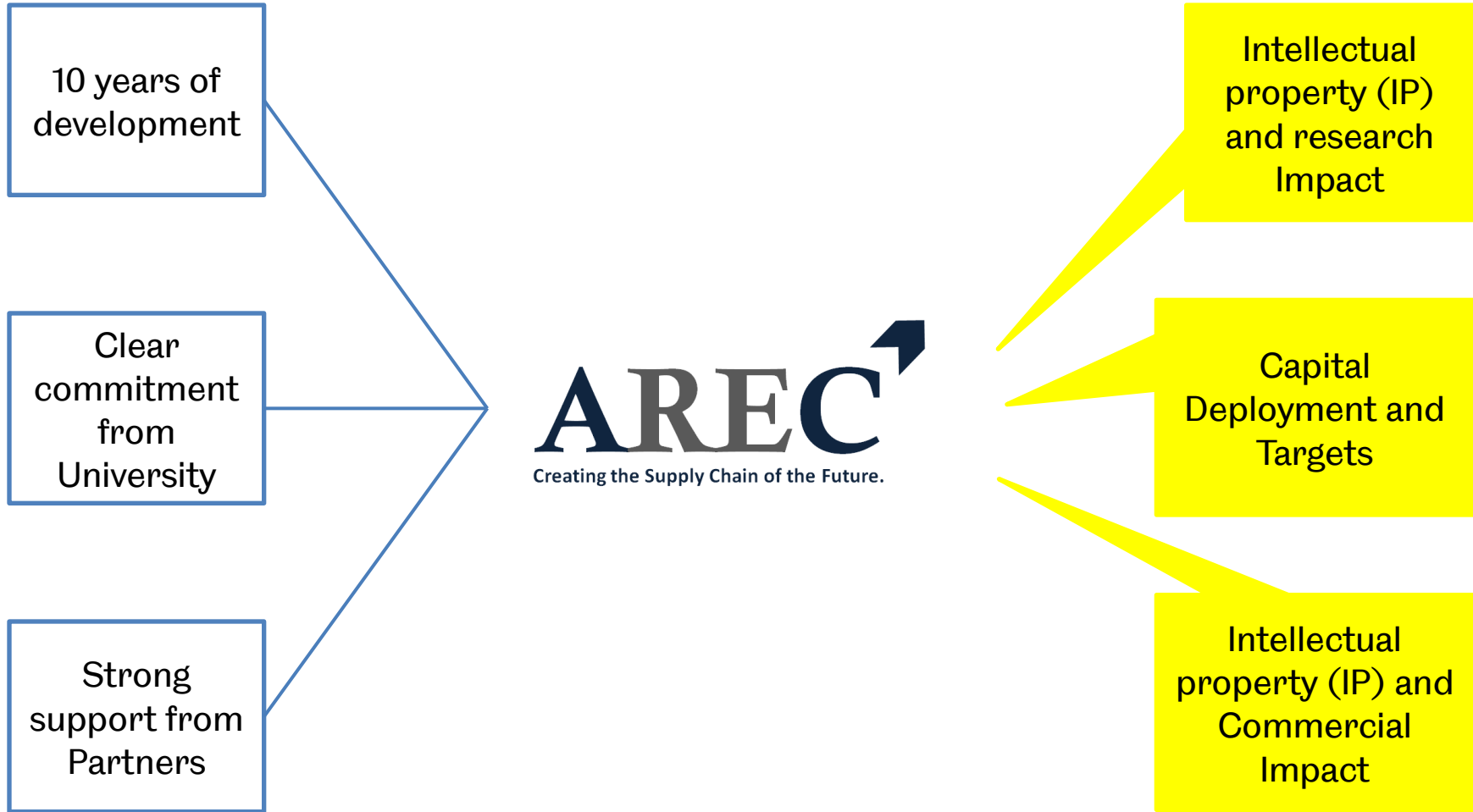


AREC is the vehicle to channel and return value



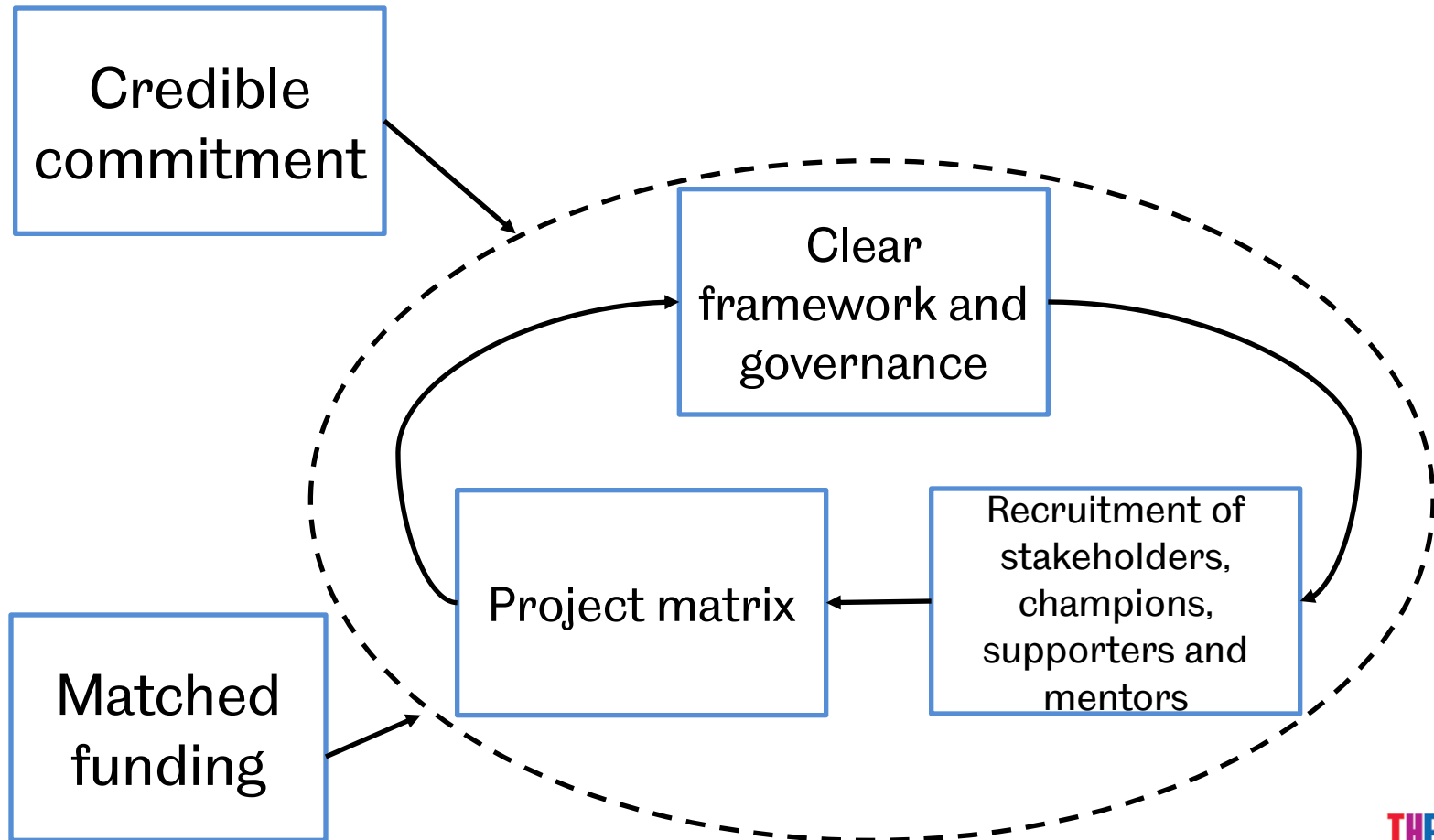


Why AREC is the right vehicle





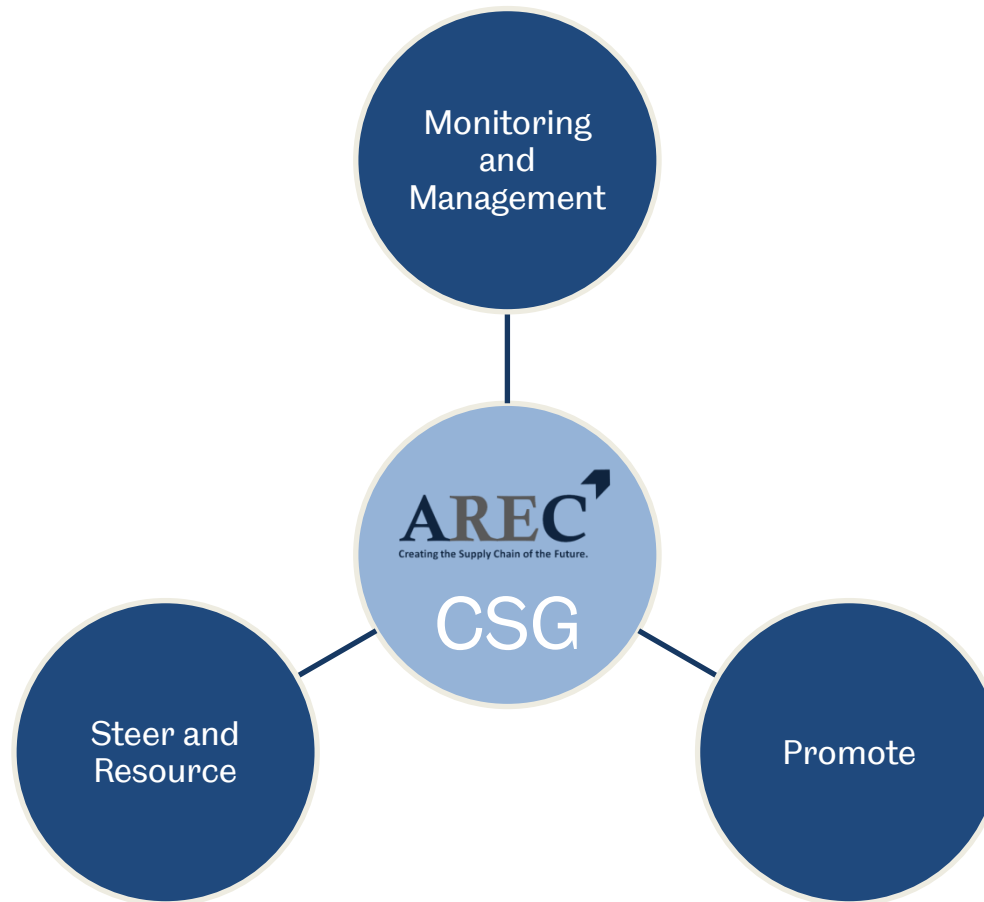
AREC's Partnership Model



Partnership Model in action (AMRC and NAMRC examples)

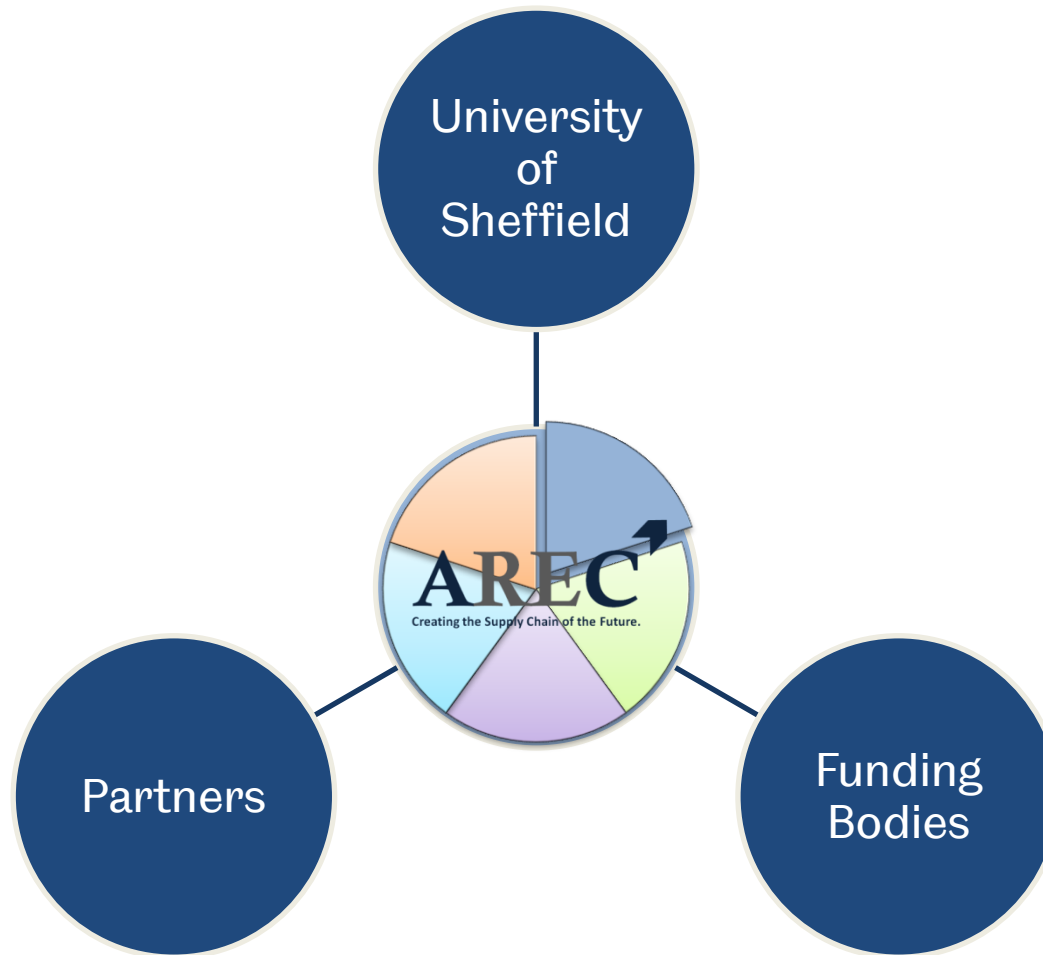


Scaling the Partnership Model – The Role of the Collaborative Steering Group (CSG)





Sharing created Value



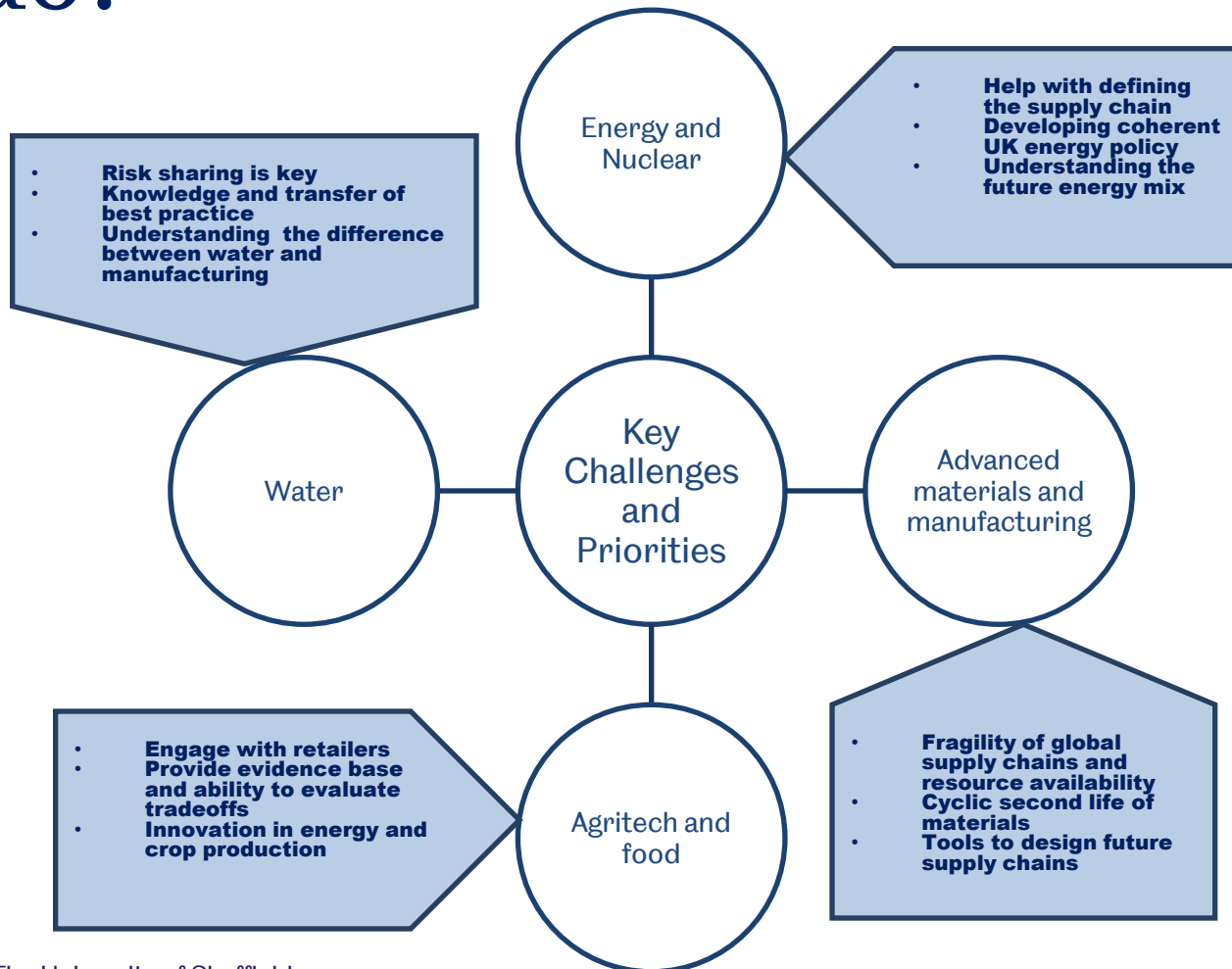


Recognising and accounting for Value





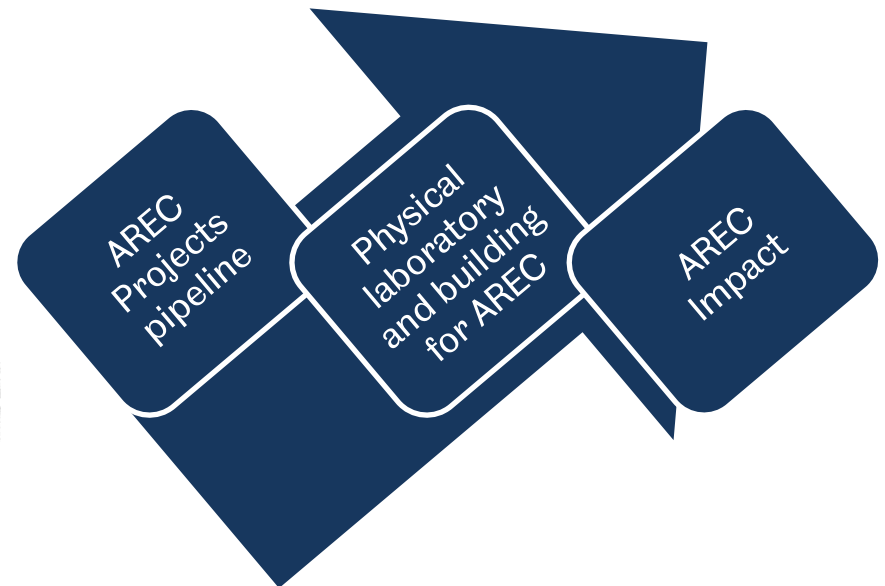
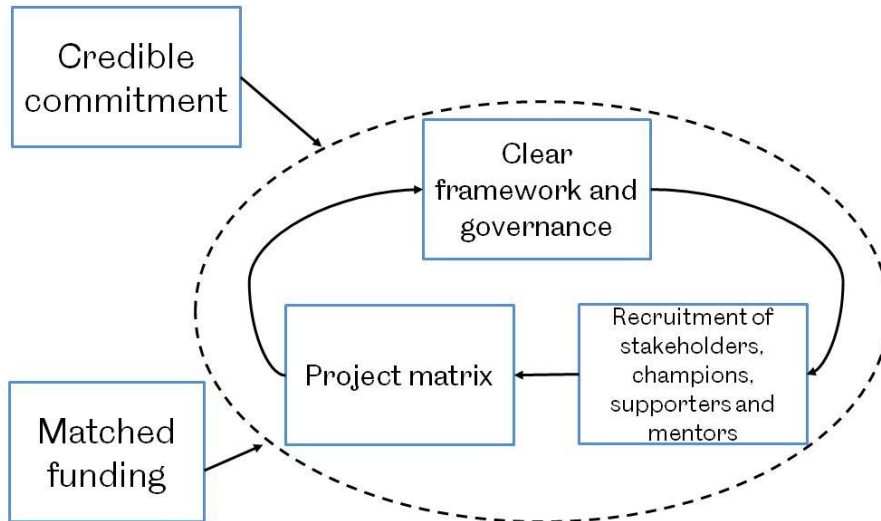
Identifying goals: What will AREC do?



This diagram summarizes the main findings and top priorities in each of the sectors that were highlighted during the workshop.

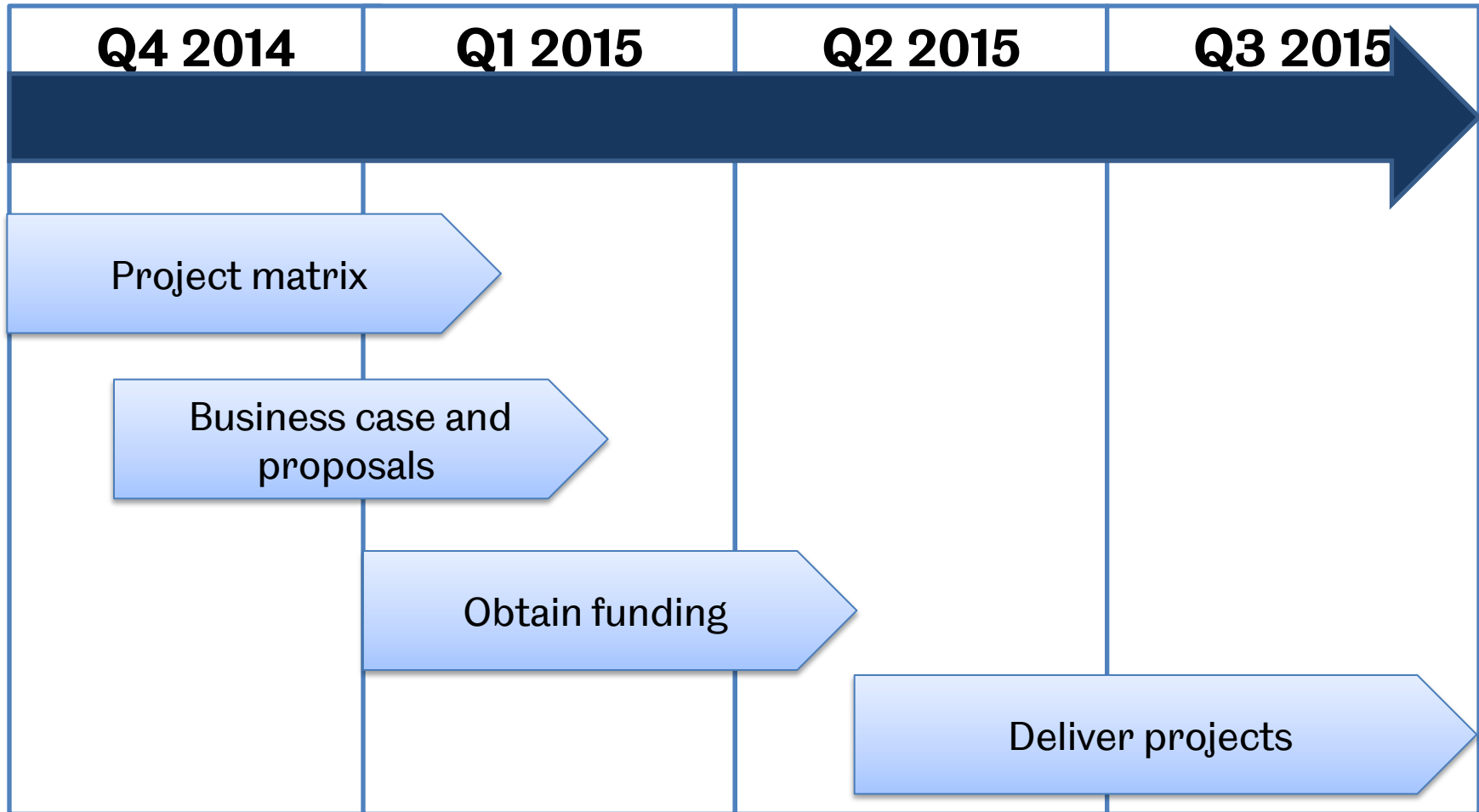


Selecting goals: The Partnership Model





Timelines for next steps



What specific resources do we need?

- A Business Development Director / Manager
- A Commercial Director / Manager
- A Finance and Funding Director / Manager
- A Marketing/Impact Officer
- An administrator
- Several Research Assistants / Post Doctoral Research Associates / Technicians / Programmers
- A floor for AREC laboratory (short term), and a building (mid-long term)
- Kits for the infrastructure

Possible investment and funding sources

- **Partners and Industry**

- R&D
- CSR

- **University**

- IIKE
- ESRC IAA
- EPSRC IAA
- HEFCE / HEIF
- Depts/Faculties/SDF

- **Funding bodies**

- Innovate UK
- BIS
- EPSRC
- ESRC
- EU H2020
- ERDF / ESF / Erasmus
- LEP
- Government



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To Discover And Understand.

Creating the Supply Chain of the Future.