

## Tender to develop a National Strategy for Advanced Materials Innovation: Stage 1 (Phases 1 and 2)

### *Development and Presentation of the Strategy Framework*

In 2023 Royce is seeking to promote and support the development of a National Strategy for Advanced Materials Innovation<sup>1</sup>. To achieve this, we will need to draw on the UK's research community (and international connections) and contract resource to develop and manage the required framework.

This initial Tender will be for stage 1 which covers the initial 2 phases of a longer, and major piece of work: to develop a comprehensive *National Strategy for Advanced Materials Innovation* with input from across the entire community, underpinned by a broad consultation process and support from government, including the Department for Business, Energy and Industrial Strategy (BEIS).

For this initial stage we are looking to appoint a contractor to develop a fresh and insightful *Strategy Framework for Advanced Materials Innovation*, developed and agreed with a cross-section of the materials community. We expect this initial framework document to be no longer than 6000 - 8000 words, plus infographics and images as appropriate.

*The focus of this exercise is innovation and technology translation against national need: while advanced material's research is an acknowledged UK strength, we recognise the need to be much better at linking the science to commercial reality. The aim of this Strategy is to identify opportunities and stimulate measures which close this gap and ensure that the UK is a front runner in embedding advanced materials into our manufacturing sectors such as transport, digital, energy, building and health.*

To this end, it is anticipated that the Strategy will have a strong Challenge-led element aimed at:

- confirming the key materials innovations required in light of societal and commercial drivers
- clarifying the technology gaps and interfaces which need to be addressed
- making a series of recommendations around these gaps and interfaces

Further, it is recognised that most materials innovations span historic industrial sectors and hence there will be a desire to highlight cross-industry technology development opportunities which support a more agile materials user/manufacturing community and can adapt to changing global markets. Sustainable use of resources and national resilience will be a further axis underpinning the strategy.

Stage 1 does not encompass development of the Strategy itself in detail, which will be a much longer piece of work that we expect to take several months, including collection of the necessary evidence and its interpretation. This first stage is an underpinning activity that sets the direction of travel and structure for this more detailed exercise and attracts the necessary engagement and input. This is essential given the breadth and depth of Advanced Materials as a discipline which spans Research, Development and Innovation (RDI) across a diverse research base of the UK and beyond.

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<sup>1</sup> defined as any material (system) to which substantial 'value' is added through processing or modification. Advanced materials can therefore range from steels and ceramics, through polymers to metals, composites or functional devices. Bulk chemicals and pervasive low value bulk materials are excluded from this work

Our expectation is that that the appointed contractor will undertake a combination of desk research, limited consultation with representative individuals/organisations and a workshop to test the thinking; subsequently producing a Strategy Framework and Vision to be launched in Westminster in the Spring of this year at an event which represents the second phase of this tender.

We consider this first Stage (Phases 1 and 2) covering the background framework and a launch event, to be fundamental to the success of the wider Strategy development, as it will:

- Determine an agreed methodology for the delivery of an impactful Strategy along with a clear outline of the proposed output.
- Stimulate the necessary buy-in from key stakeholders linking industry, government, and academia into a common understanding around purpose and expectations

The proposal should respond to the brief below, and set out high-level thinking and organisational expertise detailed towards the end of this tender.

Proposals should be no longer than C.1500 words; we are seeking a demonstration of understanding, outline methodology and capability/track record. Stage 1 encompasses two Phases:

### Stage 1

#### Phase 1 – development of the framework

We expect the Framework developed in Phase 1 to consider, but not be limited to the following aspects:

- 1) Background research requirement– to inform markets and opportunities (including emerging and enabling technologies)
  - i) Consideration of previous studies which will inform both the baseline position of the UK's advanced materials capability/economic viability
  - ii) Any existing Government, trade body and industry sector output which inform the challenges to be addressed (note considerable industrial input into the framework consultation is essential)
  - iii) Obtaining clarity on the position of the UK opportunities vs overseas activities
- 2) The respective roles of higher education, public research institutes and industry
- 3) Summary of recent or ongoing funded programmes
- 4) The approach taken for the necessary level of stakeholder engagement and input
- 5) Any requirement for commissioning studies around investment requirements via government/private routes
- 6) The approach to considering skills retention/development
- 7) Addressing the role of regulation and societal drivers
- 8) The final reporting structure including
  - i) Top-down review of market pull around sector /challenges considerations both nationally and globally for current and future markets
  - ii) National capabilities, gaps and resource constraints along with relevant critical dependencies
    - i. Viable innovation opportunities at National and global level
    - ii. Security of supply considerations
  - iii) People and skills
  - iv) National objectives for 5-20 years
  - v) Investment and policy requirements

This Outline Strategy Development Framework will be shared with key stakeholders prior to the launch event covered by Phase 2 for review and initial feedback.

A further part of Phase 1 will be the development of the tender document for Stage 2 of the strategy development (see below). The successful candidate will be expected to contribute to the content and scope development of this tender to ensure alignment with the intent of the framework.

*NB: The Royce Comms Team can support with design and graphics of this initial high-profile report.*

### Phase 2: Launch of the Strategy Framework – announcing the commencement of the strategy development

The successful organisation will be expected to play a major support role at this event, primarily through the provision of required background presentation material for the event organisers.

The event will be held in London with the aim of establishing national engagement and profile for the wider strategy initiative. We expect a Ministerial presence at the event.

Royce will be responsible for the event organisation, including venue hire and catering, with the Contractor responsible for the content and shape of the event.

The successful organisation will also be responsible for incorporating any last-minute updates to the approach prior to more general announcement and the transition to Stage 2 where the strategy will be developed in detail.

### **Stage 2: (not part of this tender)**

Following on from the launch event and incorporation of any feedback, Stage 2 will see a rapid transition to the delivery of the strategy through multiple strands of activity:

- Formation of the necessary working groups, sponsors and advocates
- Commissioning background research for markets/opportunities
- Establishing and delivering a comprehensive community engagement portfolio of events
- Commissioning an innovation investment strategy review
- Drawing together the overarching strategy report and recommendations and supporting provision of input to a comprehensive communications campaign

Although not guaranteed it is anticipated that the organisation responsible for producing the Strategy Development Framework will play a leading role in the coordination and delivery of the ultimate strategy. Indeed, bidders are asked to provide an indication of what they could potentially offer in terms of the development of the overall strategy. It is anticipated that other 3<sup>rd</sup> party resources will also be contracted to deliver the final strategy, depending upon the requisite expertise required.

## Management and Governance

The contract will be directly managed by the Royce CEO or their delegate, together with a small project team. The ultimate Strategy will be overseen by a wider project/steering board which will consist of key stakeholders representing the UK materials research and innovation community and Government.

## Timeline

We envisage the project will follow this timeline, with some flexibility where necessary.

- Introductory Meeting: 12-13.00, 11 January 2023
- Invitation to Tender: 18 January 2023
- Closing date: 9:00 hrs, 27 January 2023
- Panel meeting: 1 Feb 2023
- Appointment of Contractor: 8 February 2023
- Planning Meeting: 22 February 2023
- Draft report presented to Royce CEO: 24 Mar 2023
- Finalisation of report: 31 Mar 2023
- Approved design and Print of report: 6 April 2023
- Strategy Development Framework launched in Westminster: 20 April 2023
- Launch of tender for Stage 2 – Advanced Materials Innovation Strategy Development: 28 April 2023

## Budget

Up to £30,000 is available for this project inclusive of VAT and expenses.

## How to Submit a Proposal

Submission by 09:00am on 27 January 2023

Contractor will be selected by early February

Proposals should be no more than 1500 words and should include:

- Understanding of the brief
- An outline methodology for achieving the brief which also touches on a proposed methodology of the Advanced Materials Innovation Strategy.
- A statement of credentials in relation to the brief including key personnel and examples of previous work
- Costs including fees and expenses (inc. VAT)
- Previous customer feedback on similar work

Please submit PDF proposals by email to [info@royce.ac.uk](mailto:info@royce.ac.uk)

## Proposal Evaluation

We will evaluate proposals using the following criteria:

- Understanding of the brief and proposed methodology, 50%
- Previous experience and subject knowledge, 20%

- Value for Money, 20%
- Ability to continue to take a major role in Stage 2 – a National Strategy for Advanced Materials Innovation, 10%

The selected contractor will be required to operate within The University of Manchester agreement of provision of services. A copy is available upon request.