

# Transforming Foundation Industry Small Scale R&D Competition – advanced summary for information

Dr Sarah Connolly MIMMM  
Innovation Technologist

Working draft for information only, the  
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Opening August 16th 2021



# The Foundation Industries

The foundation industries (metals, glass, paper, ceramics, cements, bulk chemicals) must embrace new ways of working, with a focus upon energy and resource efficiency, utilising advanced technologies.

## TFI Challenge

The aim of the Transforming Foundation Industry challenge is to make this sector more internationally competitive through becoming more environmentally sustainable.

Success can be measured in terms of:

- A reduction in carbon emissions (both from energy production and as a by-product of material transformation), or a reduction in material consumption.
- Jobs created, especially skilled jobs in less advantaged regions.

To achieve these aims, we can fund projects in the sector itself, its supply chain, and in some cases users of products. In all cases, projects should demonstrate a clear focus on and benefit to the FI sector.

The Challenge is based on the premise that industries can work together to solve common problems. Check the specific rules applying to the Stream that you are applying to.

We do not fund projects relating to fuel switching, hydrogen or CCUS – there are other Challenges that may do.

# The Foundation Industries

The foundation industries (metals, glass, paper, ceramics, cements, bulk chemicals) must embrace new ways of working, with a focus upon energy and resource efficiency, utilising advanced technologies.

## TFI Small Scale R&D Competition

- This competition is to encourage companies wishing to undertake smaller projects to apply for Innovate grant funding, perhaps for the first time.
- Projects should support the objectives of the TFI Challenge, and be focused on the foundation industries or their immediate supply chains. The supply chain includes suppliers of process feedstock, or equipment used in the processing of the feedstock.
- Projects do not need to be cross-sector, but should be able to demonstrate that the findings could be adapted to other sectors in the future.
- The competition has a £1.5m budget, and projects should have total eligible costs of £25 – £250k.
- Projects should be 3 -12 months duration.
- Universities and RTOs can act as a collaborator, but cannot lead a project. Their share of the grant is limited to 30% of the total eligible costs.

# Competition Scope

## Scope

Projects must focus on resource or energy efficiency in the foundation industries, and can focus on one or more of the following areas:

- new products
- new processes
- new services and business models.

Applicants can be from the TFI sector, or the sector supply chain.

## What is innovation?

You could be developing a new product, improving your existing manufacturing process or maybe trialling a new business model. Its OK if the project only takes you to the next stage of the development process. This competition is designed to encourage companies to begin innovating. Its all about the impact it will have on your business in terms of our TFI objectives.



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# Funding Available

## Summary of Project Streams (Total eligible costs)

### Stream 1 (£25k - £75k)

- Must be led by a SME
- Does not have to be collaborative.
- A simplified application process

### Stream 2 (£75k - £250k)

- Can be led by any sized company, as long as there is a SME partner.
- Must be collaborative.

### Notes on Stream 1 (£25k - £75k projects)

- For Stream 1, there will be a simplified process with fewer questions.
- We're keen to level the playing field for SMEs who aren't experienced in writing bids. To help with this, we may invite qualifying applicants to do a video presentation.

The funding allocated to each workstream will be decided based on the proposals received.

A portfolio approach to project selection will be used.

# Funding Available

## What are eligible project costs?

In summary:

- Direct employment costs, excluding bonuses, non-productive time etc.
- Direct overheads, including office utilities and IT. 20% assumed as a default, or can be calculated.
- Sub-contract costs
- Materials (Consumables and limited Capital)
- Travel and subsistence
- Other (includes IP protection up to £7,500)

We can pay for the depreciation costs of existing or new equipment that are incurred during the project. But if the value of the capital equipment being purchased is excessive, the proposal will be rejected.



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# Funding Available

## How much can a project claim?

The percentage of the project size that can be claimed as a grant depends upon:

- The size of business
- The type of research being completed



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# Funding Available

## How much can a project claim?

The percentage of the project size that can be claimed as a grant depends upon:

- **The size of business**
- The type of research being completed

### Definitions of company size

- a small business has fewer than 50 employees and either a turnover of up to €10 million or a balance sheet total of up to €10 million
- A medium-sized business has fewer than 250 employees and either a turnover of up to €50 million or a balance sheet total of up to €43 million
- A large business in this context means any enterprise which is not an SME



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# Funding Available

## How much can a project claim?

The percentage of the project size that can be claimed as a grant depends upon:

- The size of business
- **The type of research being completed**

For this competition, we are accepting both feasibility studies and experimental development.

### **Feasibility studies**

This means analysis and evaluation of a project's potential, aimed at supporting the process of decision making. Feasibility studies will usually help businesses decide to work either individually or collaboratively with other industrial or research organisations, before conducting a subsequent larger project.

### **Industrial research**

Planned research or critical investigation to gain new knowledge and skills. This should be for the purpose of product development, processes or services that lead to an improvement in existing products, processes or services.

### **Experimental development**

This may comprise prototyping, demonstrating, piloting, testing and validation of new or improved products, processes or services in environments representative of real life operating conditions. It excludes routine or periodic changes made to existing products, production lines, manufacturing processes, services and other operations in progress, even if those changes may represent improvements.



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# Funding Available

## Summary of Project Streams (Total eligible costs)

For **feasibility studies and industrial research projects**, you could get funding for your eligible project costs of:

- up to 70% if you are a micro or small organisation
- up to 60% if you are a medium-sized organisation
- up to 50% if you are a large organisation

For **experimental development projects** which are nearer to market, you could get funding for your eligible project costs of:

- up to 45% if you are a micro or small organisation
- up to 35% if you are a medium-sized organisation
- up to 25% if you are a large organisation

### Project contribution example

For a project with eligible costs of £25,000, we could contribute up to £17,500 (70%). You would have to show that you are able to contribute £7,500. This could be in staff time, materials or other relevant costs.



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# Project Content

## What sort of innovative projects are we looking for?

### Production phase

- Use of feedstock with lower environmental impact, such as alternative or recycled materials. This could be materials requiring lower processing energy input, or which have lower carbon emissions during chemical transformation.
- Reduced consumption of energy or materials in the processing of a product. This might be a change in production method or process control, (and will be seen as a reduction in the specific energy content of the product). This could include new forms of condition monitoring or quality control.
- Development or adaptation of a product or method used in other sectors/applications for a new FI application.
- The use, either internally or at a different site, of material waste generated during the product process,
- The use of waste heat from a different process.

### In Use phase

- Reducing the amount of product required in its final application. The product might be supplied directly to an end user, or used as a component or feedstock of another product that is then sold to an end user.
- Reducing the energy used by a system that the product is part of.

### End of life phase

- Lengthening the product life.
- Making a product easier to recycle.
- New uses for the end of life product.



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# Project Content

## What sort of innovative projects are we looking for?

### What we won't fund

- Anything that is commercially available (either off the shelf or to special order), or which your competitors are already doing. Or a feasibility study for the installation of these things.
- Anything relating to fuel switching, hydrogen or carbon capture and storage.

### Guiding principles for deciding if something is sufficiently innovative

The TFI challenge offers grant funding to companies to help overcome technical uncertainty. If there's no uncertainty, then it's not research, and so the TFI Challenge can't subsidise your costs.

Your project must be beyond best practice. We can't fund the investigation or implementation of established sector techniques or products that are already commercially available and designed for use in your application. So this isn't the right fund to "catch up" with other companies in your sector. But we can support the first use in your sector of techniques or products used in other sectors (including TFI sectors).

*If there is something in scope that you've been thinking about, but never had the time or funds to do, then applying for a small grant could just be the start of something big.*

# Your Application

## Before you start

Attend or watch the competition launch event. This will be advertised in advance through the KTN newsletter.

## Completing the Grant application

- Before you start, make sure that you have a clear idea about what you want to achieve, and that it is in scope of the competition.
- Plan and cost the project in a similar way to any other work, checking what you can claim for.
- If you are including a collaborator or sub-contractor, make sure that they are happy to be part of the project.

## Do you need help to find a project partner?

If you need help finding specialist technical support, please contact:

- The Knowledge Transfer Network (KTN) [www.ktn-uk.co.uk](http://www.ktn-uk.co.uk)
- Transforming Foundation Industries Network + [Contact Network+](#)



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# Your Application

## The on-line application process

You need to complete the following sections:

- Company details
- Project plan & Costing
- Written questions about your project

## Competition timeline (2021)

Competition Opens:	August 16th
On-line competition briefing:	August 17th
Competition Closes:	September 29th

## Support in writing your application

The Knowledge Transfer Network (KTN) offers a free service to help critique your application. Try to allow at least 10 working days for them to turn around an application and allow time for you to take on board their comments.



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# Managing a Project

- You should plan and manage the delivery of the project the same way as with any other contractual agreement, and within limits it is up to you how you do this.
- To make a quarterly claim, you will need to use a simple timesheet to log your time spent on the project, and provide evidence of other costs. A Monitoring Officer (MO) will be appointed who will guide you through this process and approve your claims.
- You will need to supply an independent accountant's report for the final claim.
- There will be quarterly progress review meetings for you to report on how the work is going.
- If you are working with a collaborator, you will need to arrange for a collaboration agreement to be signed within 90 days of the project starting.



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# FAQs

- **What if the project doesn't go to plan?** Contact your MO asap – changes are usually accepted provided that the objectives of the work and the end date remain the same.
- **What if it doesn't give the outcomes we were expecting?** Innovation is an uncertain business, our contribution helps to de-risk it. While we hope that your project is successful, knowing that something isn't a good idea can also be valuable. Provided that you made best endeavours to make things a success, then that's fine and we won't hold it against you.



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# Business Support



## Innovate UK Edge

This newly launched programme will help SMEs to develop wider aspects of their business. All companies receiving grants will be offered 2 days of **free** 1:1 coaching from an experienced expert.

[Innovate UK EDGE](#)

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