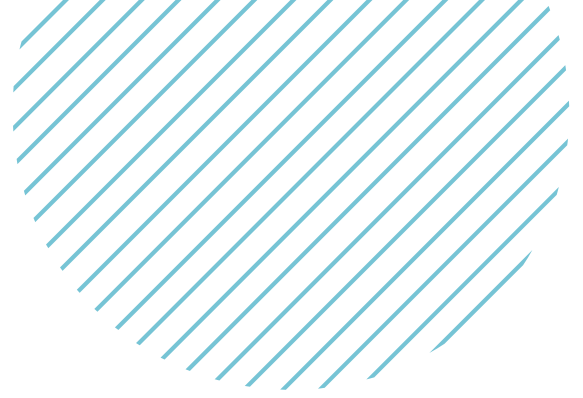


# Enhanced research and development (R&D) tax reliefs

An introduction





# Introduction

R&D tax reliefs are available to companies in almost every industry and are not restricted to 'high-tech' activities, allowing companies to claim an enhanced corporation tax deduction for certain qualifying expenditure. However, it is still the case that a large proportion of companies that are eligible to claim the reliefs do not. If you can answer "yes" to any of the following questions, your company may be able to claim generous R&D tax reliefs:

**1** Does your company develop new products or processes or is it seeking to improve existing ones?

**2** Is the company duplicating existing products or services, but in a new or improved way?

**3** Has your company implemented a new software system designed for your particular business or industry?



# What is R&D for tax purposes

R&D for tax purposes has a specific statutory definition, which differs from commercial engineering and accounting definitions. Broadly, R&D takes place when a project:

- Seeks to achieve an **advance in science or technology**
- Through the **resolution of scientific or technological uncertainty**

In general, the expenditure that relates to developing and/or improving the product/process will qualify. This will fall within one of several specified broad categories, most commonly:

- Direct staff costs, i.e., salary, bonuses, employer's pension contributions and NICs, etc.
- Externally provided workers (limited to 65% of such costs)
- Subcontractor payments (limited to 65% of such costs) – for SMEs only
- Consumable items and prototype development costs
- Software costs
- Certain 'qualifying indirect activities' attributable to R&D activities, e.g., information services, maintenance/security/administration, training and feasibility studies
- Capital expenditure may qualify under certain circumstances
- From 1 April 2023, costs of cloud computing and dataset licensing may qualify.

We will work with you to develop a report that satisfies the key areas that HMRC focus on when examining R&D claims to ensure that they meet this definition, covering four core areas:

- Identifying the **scientific or technological advance** being sought
  - Focus on the project's aim for an advance – for example, an appreciable improvement in a product/process, or in the method by which it is produced/undertaken.
  - Science doesn't include works in the arts, humanities or social sciences
  - Commercial innovation isn't sufficient
- Identifying the **scientific or technological uncertainties** that were encountered:
  - Uncertainty exists when knowledge of whether something is scientifically possible or technically feasible, or how to achieve it in practice, isn't readily available or deducible by a competent professional working in the field.
  - If difficulties were encountered, or if the project time and costs overran, then uncertainty is likely to be present.
  - Uncertainties that can be resolved through relatively brief discussions with peers are likely to be considered routine and not qualifying.
- Explaining how the **uncertainties were overcome**:
  - Focus on the methodology, investigations and analysis undertaken.
  - Describe the successes, failures and their impact on the project.
  - Failure of a project, either commercially or because the uncertainties were not overcome, does not imply that R&D was not present.
- Explaining why the knowledge being sought was **not readily deducible by competent professionals**
  - Outline the professional qualifications, profile and background of the key individuals involved in the project.
  - This sets the uncertainty in the context of the known state of the field of research.

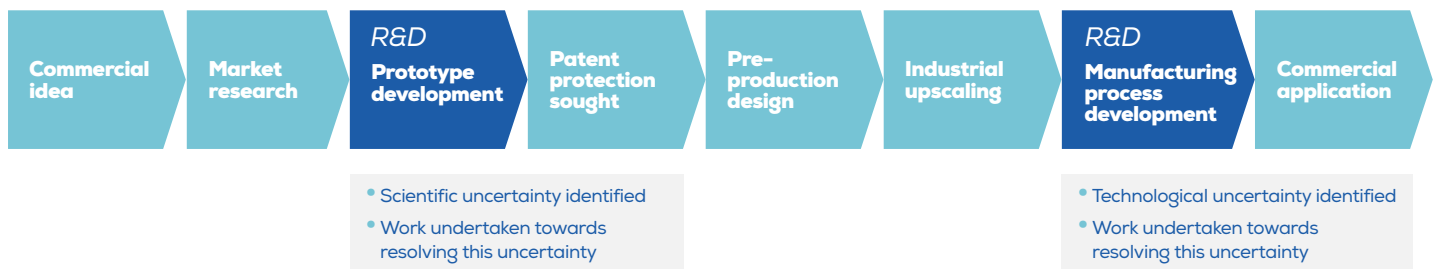
# The timing of R&D

A qualifying project starts when the work to resolve the uncertainty starts – the technical issues will be identified and it will be established that the current state of knowledge within the field does not provide a solution.

The project ends when the uncertainty is resolved – a working prototype has been developed, ready for testing or production – or when the work otherwise towards addressing the uncertainty otherwise ceases.

New uncertainties may be identified as a project proceeds, even during a production phase.

**In broad overview, a development project might be illustrated as follows:**



## How much is the relief worth

The amount of relief varies according to the size and profitability of the company.  
For every £100 of qualifying expenditure:

- For profitable small and medium enterprises (SMEs), there could be up to **£24.70 of additional tax savings. (£21.50 from 1 April 2023).**
- Loss-making SMEs may be able to claim a **cash repayment** (known as an R&D tax credit) **of up to £33.35. (£18.60 from 1 April 2023).**
- For large companies, a different claim mechanism, with a payable credit that is itself taxable, provides up to **£10.53 of additional tax savings. (£15.00 from 1 April 2023).**

An enterprise (either a single company or a group taken together) will generally be an SME if it has fewer than 500 employees AND either:

- Annual turnover of €100 million or less; or
- Assets in the balance sheet of €86 million or less

Note that there is some complexity in the application of these limits for groups.

# Illustrative calculations (based on rates post-31 March 2023)

For a profitable SME:

	<b>Income/ (expense) £</b>	<b>Corporation tax liability @25% £</b>
Net profit before tax and R&D costs	500	
Qualifying R&D expenditure	(100)	
Net accounting profit before tax	400	100.00
Additional deduction for R&D expenditure @86%	(86)	(21.50)
Tax-adjusted profits	314	78.50

For a loss-making SME:

	<b>Income/ (expense) £</b>	<b>Tax credit @10% £</b>
Net (loss) before tax and R&D costs	(500)	
Qualifying R&D expenditure	(100)	
Net accounting (loss) before tax	(600)	
Additional deduction for R&D expenditure @86%	(86)	
Tax-adjusted (loss)	(686)	
60Loss attributable to R&D activities – surrendered for tax credit	186	18.60
Remaining (loss)	500	

For a large company:

	<b>Income/ (expense) £</b>	<b>Corporation tax liability @25% £</b>
Net profit before tax and R&D costs	500	
Qualifying R&D expenditure	(100)	
R&D 'expenditure credit' @20%	20	
Net accounting profit before tax	420	105.00
Payable credit		(20.00)
Final net liability		85.00

## CASE STUDY

# Educational software platform development

After being founded as a traditional educational media company, our client transformed itself into a leading technology-based internet and software-as-a-service company, serving students worldwide. The company invests heavily in R&D with the purpose of advancing students' access to and comprehension of subject matter expertise created by professional teachers and tutors, providing a more tailored and adaptive learning experience, while reducing the traditional in-person workload for teachers.

The company made an R&D tax relief claim in relation to the initial stages of the development of a new learning management system (LMS) plugin, with work ongoing on further aspects of development. This new system will provide a complete 'turnkey' solution with extensive flexibility, customisation and community engagement functionality, greatly expanding upon the possibilities offered by existing products. At this initial stage, particular focus was required on research to understand and evaluate approaches for user roles and permissions, leading to development and implementation of a tag-based semi-automated permission system interfacing with various established APIs.

A separate aspect of the claim focused on developing semi-automated functionality to release learning modules to users according to objective-based rules set by the course administrator, which previously has only been possible as a manual process. The company initially undertook research to understand education providers' most desired progress and completion criteria, following which it worked towards implementing these desired criteria within its LMS platform – but in doing so, several technological limitations were encountered. While it has not yet been possible to address these fully, the company has implemented an initial interim solution while further work is undertaken with a view to achieving the full desired functionality.

Qualifying R&D costs involved in these projects related to staff costs, subcontractors and various software licences, totalling approximately £125,000 for the year. This achieved a net cash tax benefit to the company of approximately £30,000.

## CASE STUDY

# Online financial portal development

Originally established as a provider of small-scale lending to North West UK individuals, our client has now grown to become a multi-million pound turnover provider of short-term lending nationwide.

Historically the company had used manual transcription methods when processing client data, but this was identified as inherently inefficient and open to error, requiring duplication of information and time, ultimately leading to delays in dealing with clients and the loss of business opportunities. Recognising these weaknesses, the company committed itself to a digital transformation project, with client data security as a key focus, while eliminating numerous inefficiencies and enabling continuous accessibility at any time of day.

The company made an R&D tax relief claim in relation to the continuing development of its bespoke online client portal, expanding the capabilities of its loan ledger system while correcting miscalculations, enabling remote access for internal teams and enhancing security arrangements for all users. This work involved a continuous programme of software development and testing, with rebuild and retesting where necessary, leading to eventual roll-out as an operational system.

Qualifying R&D costs involved in this project related to staff costs, subcontractors and various software licences, totalling approximately £80,000 for the year. This achieved a net cash tax benefit to the company of approximately £20,000.

```
//create a modified fn
var modifiedFn =

//mark the element as appearing
t.appeared = true;

//is this supposed to happen only once
if (settings.one) {

//remove the check
w.unbind('scroll', check);
var i = $.inArray(check, $.fn.appear.checks);
if (i >= 0) $.fn.appear.checks.splice(i, 1);

}

//trigger the original fn
fn.apply(this, arguments);

//bind the modified fn to the element
$.fn.appear.one('appear', settings.data, modifiedFn);
$.fn.appear(settings.data, modifiedFn);
```

## CASE STUDY

# Building construction specialist manufacturer

With a focus on ecological efficiency at its core, our client is the exclusive manufacturer and stockist of a unique off-site building construction solution.

The company had developed a reliable, repeatable manufacturing process for its unique construction solution, but recognised that this process involved a number of inherent shortcomings – a high dependence on low-skill labour and bulky equipment, low production volumes and frequent health and safety concerns all drove the search for improvements to this process. Although gradual evolutions could bring some extent of benefits, with the success of its product now proven, ultimately the company required an entirely new approach to realise its potential more fully.

As the company was the inventor and pioneer of its construction system, a bespoke approach remained essential, and the complexity of the project required the involvement of a third-party subcontractor with specialist material-handling and asset finance capabilities to act as project manager, design consultant and procurement specialist.

Dividing the development work into a series of interlocking phases, the company and its subcontractor worked to design, prototype, test and then scale up each aspect of a revised, significantly more efficient, automated and safe manufacturing line and cutting tools. A high level of precision is required as part of this process and it was in no way certain that this would be achievable or, if successful the speed at which the scaled-up process could operate.

While later phases of development remain ongoing, the company has had some initial successes and has implemented replacements to certain aspects of its manufacturing processes.

The company made an R&D tax relief claim in relation to this continuing development effect, with qualifying R&D costs focused largely on subcontractor costs, but also including direct staff costs and consumables, especially in relation to the construction of prototypes. With qualifying costs totalling approximately £950,000 for the year, this achieved a payable credit in excess of £300,000.



## CASE STUDY

# Automated pharmaceutical packaging

Headquartered in the US but with a major presence in the UK, our client is a leading expert in the design, development and deployment of high-speed pharmacy dispensing systems. The Company has a history of innovation and is now continuing development work on fulfilment systems with a range of automation levels.

Prescription packaging has traditionally been a wholly manual process, which was inherently time-consuming and at risk of human error. Recognising these process shortcomings, the company is seeking to develop both a fully-automated system and a semi-automated system where a human deals with some of the more complex sorting requirements, in each case offering a revolution in the speed of operation in addition to the high accuracy rates that had been the only focus of existing solutions. Allied to this robotic machine development, the company is developing a software workflow platform to seek to integrate the dispensing process with existing patient and pharmacy records, while also addressing new UK legislative requirements for third-party data sharing.

During the development and prototyping process, it became apparent that configuration and throughput errors in each stage of the system were exacerbating issues downstream. Breaking down the system into four distinct areas with clearly-defined dependencies allowed an effective mechanism for identifying and resolving process difficulties. Scalability of existing components was also a key area of challenge, eventually resolved by the production, following extensive testing, of bespoke elements in-house.

The development process continues over several years, primarily involving costs of internal staff and prototype construction. Qualifying costs have been approximately £1 million in later years of the project, achieving a repayable cash tax credit in excess of £300,000 for a single year of the claim.

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# Get in touch



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