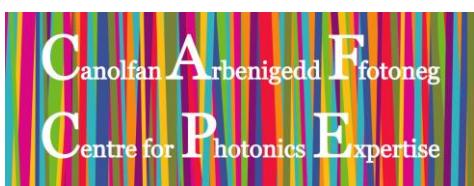


# Centre for Photonics Expertise

## Enterprise Information Booklet

v4 ENG CYM March 2022



Contact our Business Development Team to find out more.

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[www.cpe-wales.org](http://www.cpe-wales.org)



*Photonics is the technology of light. It is integral to our daily lives through technology like smartphones, screens, telecommunications and LED lighting.*

*Photonics technology is found in a wide range of industry sectors such as:  
manufacturing, automotive, food, life sciences and energy.*

The Centre for Photonics Expertise (CPE) is an industry collaborative programme that is part-funded by the European Regional Development Fund through the Welsh Government. CPE is led by four Welsh Universities that works together with companies in Wales to improve or develop new products and processes to benefit their business.

CPE is designed to provide easy access to academic resource and facilities at no cash cost to the company.

Our pan-Wales team is comprised of academic experts from Wrexham Glyndŵr University, Aberystwyth University, Bangor University and the University of South Wales.



## How it works

- To be eligible companies should have a business address within the West Wales and the Valleys region.
- We will have an introductory meeting to discuss your business and how we could work together.
- Our technical team will then work with you to discuss potential collaborations, scope the project and put together a plan of work.
- As soon as both parties agree a project plan, work can begin.
- There is no cash cost to the company.
- The academic expertise is funded by the CPE to be matched by in-kind contribution (as staff time) by the supported enterprise.
- We work with you in matched effort and resource.
- There are various simple forms to complete during the process which are described in this document.

# Why Collaborate with CPE?

CPE are a team of highly experienced engineers and scientists, specialising in photonics technologies.

With backgrounds across industry and academia, our team works closely with companies across a wide range of industry sectors providing working solutions to their engineering challenges.

CPE also provides access to unique state-of-the-art university facilities from test, measurement and analysis to design, prototype and process development.

Projects can be in any area that will impact company growth through product or process development. These range from new innovations, customised off-the-shelf component solutions, to complete off-the-shelf systems.

Read our case studies to see how we have worked with other companies: [www.cpe-wales.org/case-studies/](http://www.cpe-wales.org/case-studies/)

## Common Project Areas

- Feasibility Studies
- Quality Control Monitoring
- Production Line Improvements
- Prototype Development
- Product/Process Testing
- Modelling and Analysis

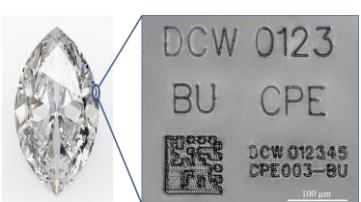
## What about IP?

CPE collaborations work on the basis of no state aid. Any IP arising from the collaboration will be jointly owned by the contributing parties. All projects are based on 50/50 matched in-kind contributions. The determination of IP share is partly defined by this as well as the actual relative effort and input to the IP. It is within the interest of all CPE partner Universities to work closely and fairly with industry.

## Our Capabilities

All four university partners of CPE specialise in different areas of photonics technologies established through years of academic research and industry collaboration.

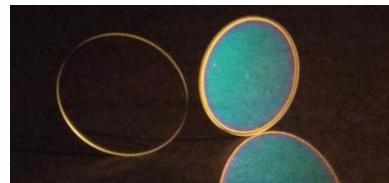
Laser Processing



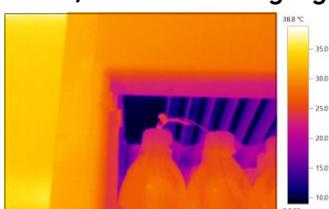
Optical Design & Prototyping



Thin Film Coating Facility



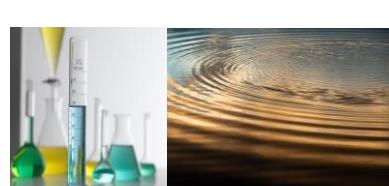
Visible/Thermal Imaging



Chemical Spectroscopy



Sensors & Measurement

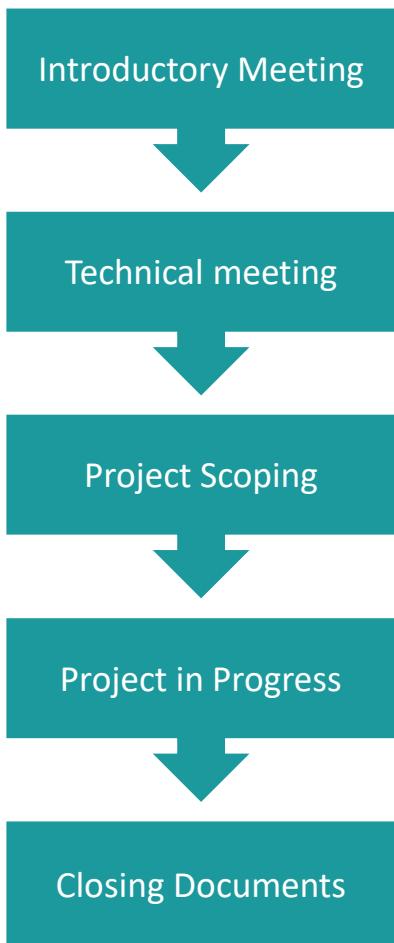


# Setting up a CPE collaboration: Eligibility Criteria

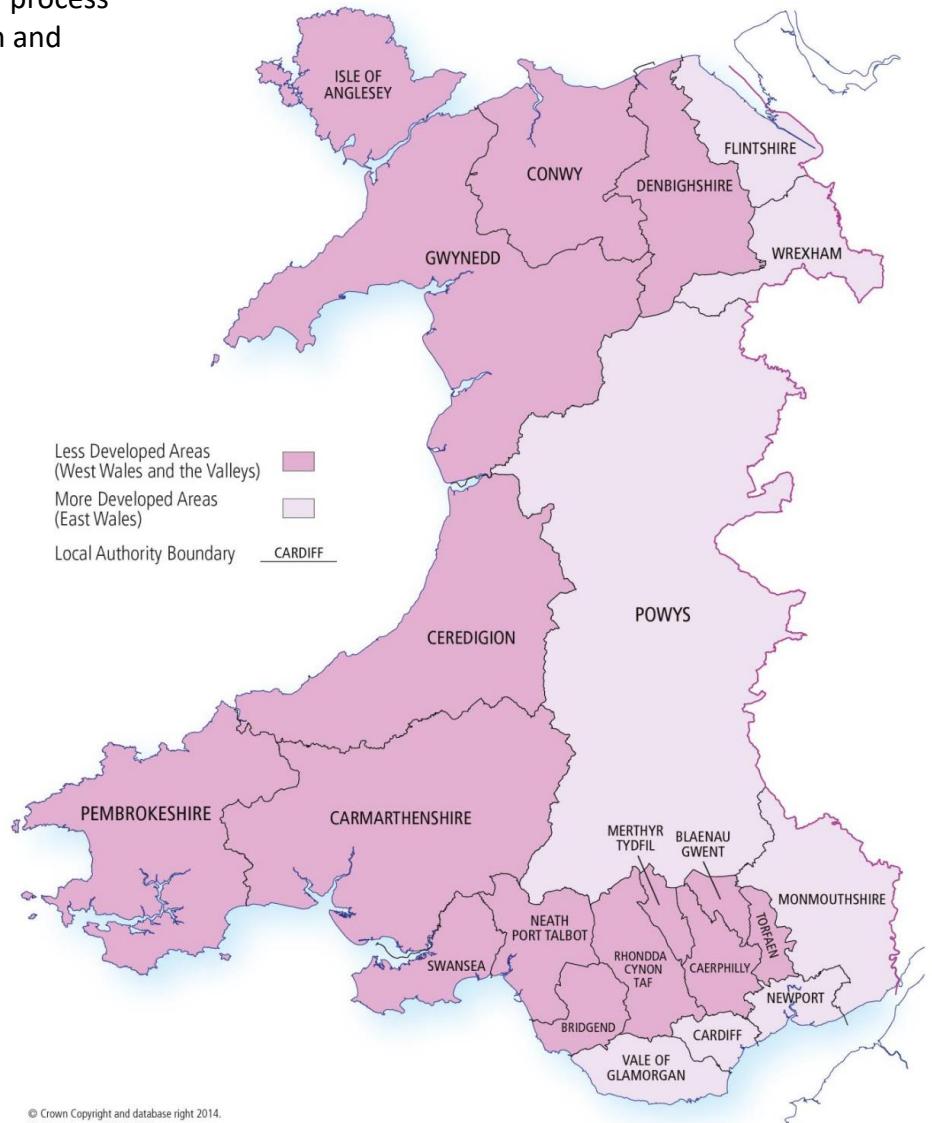
Our Business Development team will work with you to discuss your eligibility criteria and any potential project ideas. They will liaise with the whole CPE team to identify the academics with the most relevant expertise to your engineering challenge. This small team of academics will then work closely with you and your company to scope out the collaboration.

## Eligibility Criteria

1. Business address within the West Wales and the Valleys (WWV) region.
2. Project focusses on a product or process that will impact business growth and development.
3. No displacement risk.

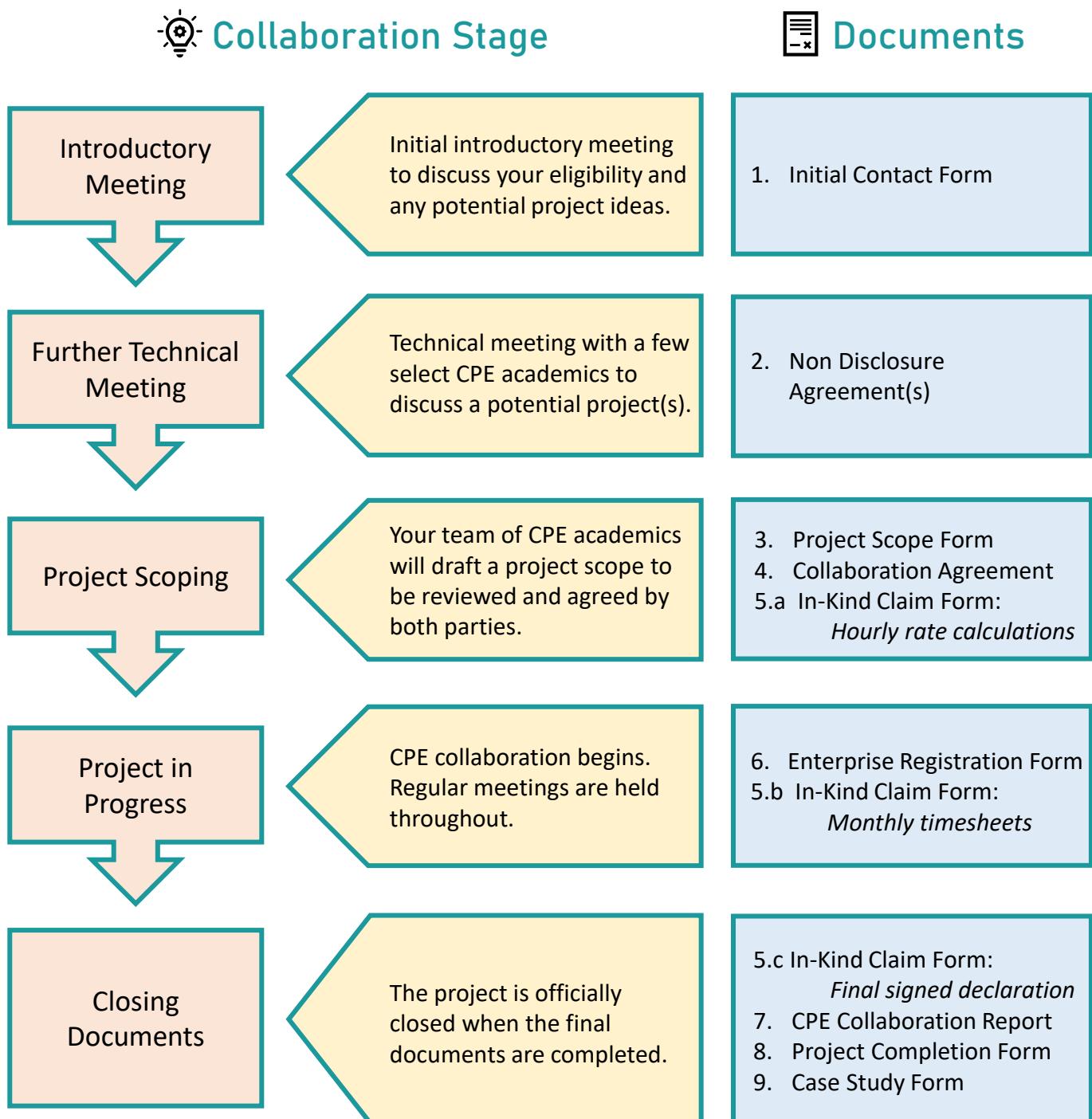


## European Structural Fund Programme Regions in Wales for 2014-2020



# Setting up a CPE collaboration: Step-by-Step Guide

Our Business Development team will take you through the various stages of the CPE process to set up a collaboration. This process typically takes a few weeks, mainly due to coordination of meetings, agreeing a project plan, and time to request authorised signatories of NDAs and Agreements within a company. On request, we have completed this process within a week.



# CPE Documentation

CPE is funded by the European Regional Development Fund through the Welsh Government and there are various documents along the way that are described in detail below. These are mainly completed by CPE staff and those that require the most attention from the company are indicated in blue.

## 1 Initial Contact Form

This allows CPE to keep your company details on our records.

## 2 NDA

Mutual non-disclosure agreement between the company and CPE partner university.

## 3 Project Scope Form

This form outlines the project aims, tasks and timeline and is written by the CPE academic leading on the collaboration with contents agreed by both parties. CPE staff time (and equivalent cost) of the project is estimated and the company staff time should match this cost to ensure a matched in-kind contribution.

## 4 Collaboration Agreement

Formal agreement of the collaboration between the company and the CPE university partner(s). This summaries the activity of the project and expected outcomes including potential IP.

## 5 Enterprise Registration Form

To be completed by the company regarding company information.

## 6 In-Kind Claim Form

To be completed by the company. This form captures the time (and equivalent cost) contributed to the project. Personal information about pay and holidays will need to be disclosed in order to calculate staff costs. All claims will be sent solely to our CPE Finance Officer such that all personal information is handled appropriately. If you are a director not receiving salary, then an estimated cost can be used. Timesheets to capture company staff time working on a project are required on a **monthly basis**.

## 7 CPE Collaboration Report

Confidential document to be completed by CPE academic for the company.

## 8 Project Completion Form

Summary document with brief description of the project, the outcomes and key ERDF indicators.

## 9 Case Study Form

Description of the project that can be submitted to WEFO and published in the public domain, such as the CPE website and via our social media channels.

# In-Kind Match Funding

All CPE collaborations are based on matched in-kind contribution. There is no cash payment. This means that CPE staff time spent on a collaboration must be also matched in cost, through staff time, by the company. This is evidenced by the completion of CPE's In-Kind Claim Form.

Personal information about pay and holidays will need to be disclosed in order to calculate staff costs. All claims will be sent solely to our CPE Finance Officer such that all personal information is handled appropriately. If the collaboration is selected for audit, pay slips or bank statements may need to be provided as additional evidence.

## In-Kind Claim Form

Each staff member on the collaboration completes the following three steps:

### 1. Hourly Rate Calculator

This is a simple calculation that is linked to gross annual salary. Pre-determined rates are also available for Non Salaried Directors.

### 2. Timesheets

Timesheets need to be completed for each calendar month. These should detail the work activity completed and be signed by the staff member and line manager.

### 3. Final Declaration

At the end of the collaboration the total in-kind match is confirmed in a final declaration, signed by the company director.

## Company Staff Time

The Project Scope Form will outline the various tasks assigned to each party. In general, any time spent on behalf of the projects can be recorded on timesheets.

### These activities can include:

- Working with the CPE Team on the project
- Working on project tasks independently
- Meetings with CPE Team
- Staff time analysing project progress
- Staff time assessing impact to the market
- Staff time sourcing suppliers or potential clients related to the project
- Staff time researching or applying for funding opportunities related to the project
- Staff time analysing CPE inputs and reports
- Telephone calls in regards to the project
- Internal meetings to discuss the project
- Travel to and from meetings

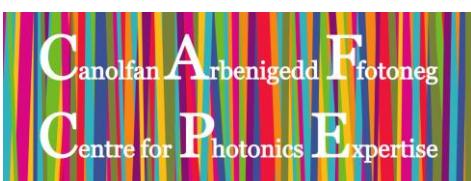
# Beyond the CPE collaboration

For many of our Industrial collaborators, their CPE collaboration is just the beginning.



# Canolfan Arbenigedd Ffotoneg Llawlyfr Gwybodaeth Menter

v4.0 ENG CYM Mawrth 2022



Cysylltwch â'n Tîm Datblygu Busnes i gael gwybod mwy.

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07552 249972



[www.cpe-wales.org/cy](http://www.cpe-wales.org/cy)



*Ffotoneg yw technoleg golau. Mae'n hanfodol i'n bywyd bob dydd drwy dechnoleg megis ffonau clyfar, sgriniau, telathrebu a golau LED.*

*Ceir technoleg ffotoneg mewn ystod eang o sectorau diwydiannol, megis: gweithgynhyrchu, modurol, bwyd, gwyddorau bywyd ac ynni.*

Mae'r Ganolfan Arbenigedd Ffotoneg (CAFF) yn rhaglen cydweithio ddiwydiannol wedi'i hariannu'n rhannol gan Gronfa Datblygu Rhanbarthol Ewrop drwy Lywodraeth Cymru. Arweinir CAFF gan bedair Prifysgol yng Nghymru sy'n gweithio gyda chwmnïau yng Nghymru i wella neu ddatblygu cynyrch a phrosesau newydd i fod o fudd i'w busnes.

Mae CAFF wedi'i dylunio i ddarparu mynediad hawdd at adnoddau a chyfleusterau academaidd heb ddim cost ariannol i'r cwmni.

Mae ein tîm ledled Cymru yn cynnwys arbenigwyr academaidd o Brifysgol Glyndŵr Wrecsam, Prifysgol Aberystwyth, Prifysgol Bangor a Phrifysgol De Cymru.



## Sut mae'n gweithio

- I fod yn gymwys dylai fod gan gwmnïau gyfeiriad busnes yn rhanbarth gorllewin Cymru a'r Cymoedd.
- Cawn gyfarfod cyflwyniadol i drafod eich busnes a sut y gallem weithio gyda'n gilydd.
- Yna bydd ein tîm technegol yn gweithio gyda chi i drafod cyfleoedd posibl i gydweithio, pennu cwmpas y prosiect a rhoi cynllun gwaith at ei gilydd.
- Pan fydd y ddau barti yn gytûn ar gynllun prosiect, gall y gwaith ddechrau.
- Nid oes cost ariannol i'r cwmni.
- Ariennir yr arbenigedd academaidd gan CAFF ac fe gyfrannir swm cyfatebol mewn nwyddau (fel amser staff) gan y fenter a gefnogir.
- Gweithiwn gyda chi gyda'r un ymdrech ac adnoddau.
- Mae ffurflen syml amrywiol i'w cwbllhau yn ystod y broses a ddisgrifir yn y ddogfen hon.

# Pam Cydweithio â CAFF?

Mae CAFF yn dîm o beirianwyr a gwyddonwyr hynod brofiadol, sy'n arbenigo mewn technolegau ffotoneg.

Gyda chefdiyoedd ar draws y diwydiant a'r byd academaidd, mae ein tîm yn gweithio'n agos â chwmnïau ar draws ystod eang o sectorau'r diwydiant gan ddarparu datrysiau sy'n gweithio i'w heriau peirianneg.

Mae CAFF hefyd yn darparu mynediad at gyfleusterau prifysgol o'r radd flaenaf, unigryw o brofi, mesur a dadansoddi i ddylunio, prototeipio a datblygu proses.

Gall prosiectau fod yn unrhyw faes a fydd yn effeithio ar dwf cwmni drwy ddatblygu cynnyrch neu broses. Mae'r rhain yn amrywio o ddatblygiadau newydd, datrysiau cydrannau oddi ar y silff, wedi'u personoli, i systemau oddi ar y silff, cyflawn.

Darllenwch ein hastudiaethau achos i weld sut ydym wedi gweithio gyda chwmnïau eraill.

[www.cpe-wales.org/cy/case-studies/](http://www.cpe-wales.org/cy/case-studies/)

## Meysydd Prosiect Cyffredin

- Astudiaethau Dichonoldeb
- Monitro Rheoli Ansawdd
- Gwelliannau i'r Llinell Gynhyrchu
- Datblygu Prototeip
- Profi Cynnrych/Proses
- Modelu a Dadansoddi

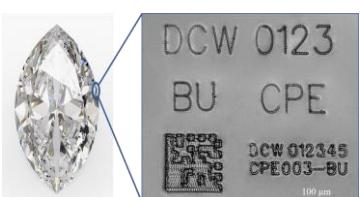
## Beth am Eiddo Deallusol?

Mae prosiectau cydweithredol CAFF yn gweithio ar sail dim cymorth gwladwriaethol. Bydd y partïon sy'n cyfrannu yn gydberchnogion unrhyw Eiddo Deallusol sy'n codi o'r prosiect cydweithredol. Mae pob prosiect yn seiliedig ar gyfraniadau cyfatebol mewn nwyddau, 50/50. Mae'r modd y rhennir Eiddo Deallusol yn cael ei ddiffinio'n rhannol gan hyn yn ogystal â'r ymdrech gymharol wirioneddol a mewnbwn i'r Eiddo Deallusol. Mae er budd pob prifysgol partner CAFF i weithio'n agos ac yn deg â'r diwydiant.

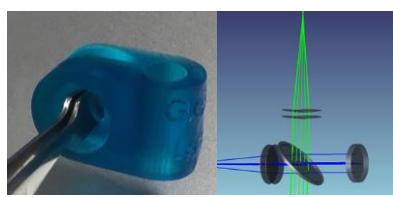
## Ein Galluoedd

Mae pob un o bedair prifysgol partner CAFF yn arbenigo mewn meysydd gwahanol o dechnolegau ffotoneg a sefydlwyd drwy flynyddoedd o ymchwil academaidd a chydweithio ar draws y diwydiant.

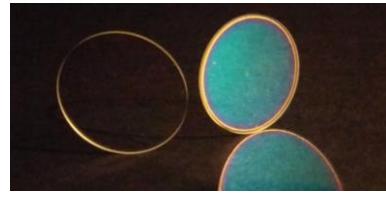
Prosesu Laser



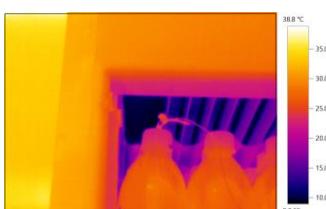
Dylunio a Phrototeipio Optegol



Cyfleuster Haenau Ffilm Denau



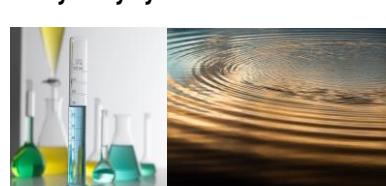
Delweddu Gweledol/Thermol



Sbectrosgopeg Gemegol



Synwyryddion a Mesur



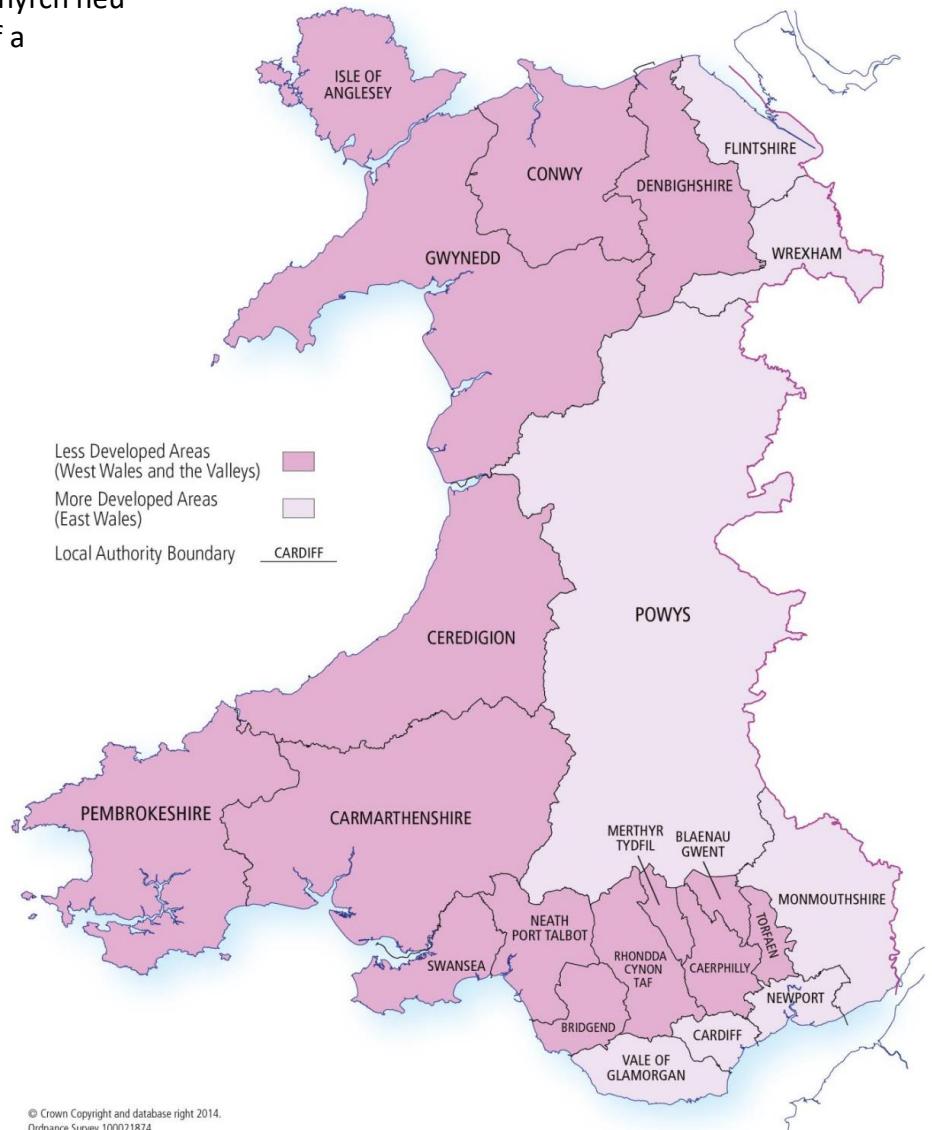
# Sefydlu prosiect cydweithredol CAFF: Meini Prawf Cymhwystera

Bydd ein tîm Datblygu Busnes yn gweithio gyda chi i drafod eich meini prawf cymhwystera ac unrhyw syniadau prosiect posib. Byddant yn trafod â'r tîm CAFF cyfan i adnabod yr academyddion gyda'r arbenigedd mwyaf perthnasol i'ch her beirianeg. Yna bydd y tîm bach yma o academyddion yn gweithio'n agos gyda chi a'ch cwmni i bennu cwmpas y prosiect cydweithredol.

## Meini Prawf Cymhwystera

1. Cyfeiriad busnes yn rhanbarth gorllewin Cymru a'r Cymoedd.
2. Prosiect yn canolbwytio ar gynnyrch neu broses a fydd yn effeithio ar dwf a datblygiad busnes.
3. Dim risg o ddadleoli.

## European Structural Fund Programme Regions in Wales for 2014-2020



Cyfarfod Cyflwyniadol

Cyfarfod technegol

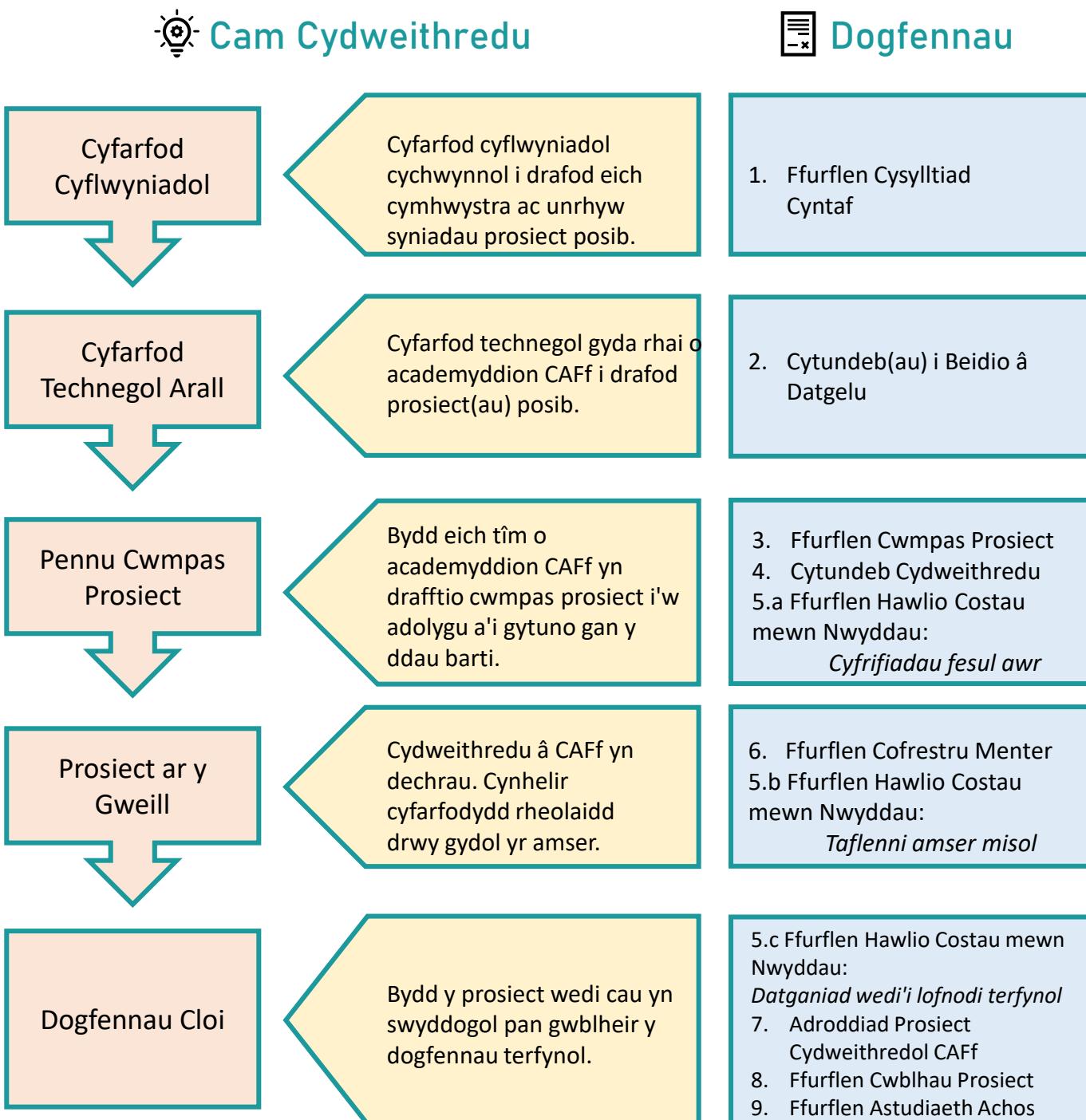
Pennu Cwmpas Prosiect

Prosiect ar y Gweill

Dogfennau Cloi

# Sefydlu prosiect cydweithredol CAFF: Canllaw Cam Wrth Gam

Bydd ein tîm Datblygu Busnes yn eich arwain drwy gamau amrywiol y broses CAFF i sefydlu prosiect cydweithredol. Fel rheol mae'r broses hon yn cymryd rhai wythnosau, yn bennaf o ganlyniad i gydlyn cyfarfodydd, cytuno ar gynllun prosiect, ac amser i ofyn am lofnodwyr a awdurdodir o Gytundebau i Beidio â Datgelu a Chytundebau o fewn cwmni. Ar gais, rydym wedi cwblhau'r broses hon mewn wythnos.



# Dogfennaeth CAFF

Mae CAFF wedi'i hariannu gan Gronfa Datblygu Rhanbarthol Ewrop drwy Lywodraeth Cymru ac mae dogfennau amrywiol ar hyd y ffordd a ddisgrifir mewn manylder isod. Cwblheir y rhain yn bennaf gan staff CAFF ac mae'r rheiny sy'n gofyn am y sylw mwyaf gan y cwmni wedi'u nodi mewn glas.

## 1 Ffurflen Cysylltiad Cyntaf

Mae hon yn caniatáu i CAFF gadw eich manylion cwmni ar ein cofnodion.

## 2 Cytundeb i Beidio â Datgelu

Cytundeb i beidio â datgelu ar y cyd rhwng y cwmni a phrifysgol partner CAFF.

## 3 Ffurflen Cwmpas Prosiect

Mae'r ffurflen hon yn amlinellu nodau, tasgau ac amserlen y prosiect ac fe'i hysgrifennir gan yr academydd CAFF sy'n arwain ar y cydweithio, gyda'r cynnwys yn cael ei gytuno gan y ddau barti. Amcangyfrifir amser staff CAFF (a chost gyfatebol) y prosiect a dylai amser staff y cwmni gyd-fynd â'r gost hon i sicrhau cyfraniad cyfatebol mewn Nwyddau.

## 4 Cytundeb Cydweithredu

Cytundeb ffurfiol o'r cydweithredu rhwng y cwmni a phrifysgol(ion) partner CAFF. Mae'n crynhoi gweithgareddau'r prosiect a'r canlyniadau disgwyliedig gan gynnwys yr Eiddo Deallusol posib.

## 5 Ffurflen Cofrestru Menter

I'w chwblhau gan y cwmni mewn perthynas â gwybodaeth am y cwmni.

## 6 Ffurflen Hawlio Costau mewn Nwyddau

I'w chwblhau gan y cwmni. Mae'r ffurflen hon yn nodi'r amser (a'r gost gyfatebol) a gyfrannwyd i'r prosiect. Bydd rhaid datgelu gwybodaeth bersonol am dâl a gwyliau er mwyn cyfrifo costau staff. Bydd yr holl hawliadau yn cael eu hanfon at ein Swyddog Cyllid CAFF yn unig, fel bod yr holl wybodaeth bersonol yn cael ei thrin yn briodol. Os ydych yn gyfarwyddwr sydd ddim yn derbyn cyflog, yna gellir defnyddio amcan gost. Mae taflenni amser i nodi amser staff y cwmni sy'n gweithio ar y prosiect yn ofynnol **bob mis**.

## 7 Adroddiad Prosiect Cydweithredol CAFF

Dogfen gyfrinachol i'w chwblhau gan yr academydd CAFF i'r cwmni.

## 8 Ffurflen Cwblhau Prosiect

Dogfen grynhoi gyda disgrifiad cryno o'r prosiect, y canlyniadau a'r dangosyddion ERDF allweddol.

## 9 Ffurflen Astudiaeth Achos

Disgrifiad o'r prosiect y gellir ei gyflwyno i WEFO a'i gyhoeddi yn gyhoeddus, megis ar wefan CAFF a thrwy ein sianeli cyfryngau cymdeithasol.

# Cyllid Cyfatebol mewn Nwyddau

Mae pob prosiect cydweithredol CAff yn seiliedig ar gyfraniad cyfatebol mewn nwyddau. Nid oes taliad ariannol. Golyga hyn fod rhaid cyfateb amser staff CAff a dreulir ar brosiect cydweithredol mewn cost, drwy amser staff, gan y cwmni hefyd. Dangosir hyn drwy gwblhau Ffurflen Hawlio Costau mewn Nwyddau CAff.

Bydd rhaid datgelu gwybodaeth bersonol am dâl a gwyliau er mwyn cyfrifo costau staff. Bydd yr holl hawliadau yn cael eu hanfon at ein Swyddog Cyllid CAff yn unig, fel bod yr holl wybodaeth bersonol yn cael ei thrin yn briodol. Os dewisir y prosiect cydweithredol ar gyfer archwiliad, efallai y bydd angen darparu slipiau cyflog neu ddatganiadau banc fel tystiolaeth ychwanegol.

## Ffurflen Hawlio Costau mewn Nwyddau

Mae pob aelod o staff ar y prosiect

### 1. Cyfrifiannell Fesul Awr

Dyma gyfrifiad syml sydd wedi'i gysylltu â chyflog blynnyddol gros. Mae cyfraddau wedi'u pennu ymlaen llaw ar gael i Gyfarwyddwyr Anghyflogedig.

### 2. Taflenni amser

Rhaid cwblhau taflenni amser ar gyfer pob mis calendr. Dylai'r rhain gynnwys manylion y gweithgarwch gwaith a gwblhawyd a dylai'r aelod o staff a rheolwr llinell eu llofnodi.

### 3. Datganiad Terfynol

Ar ddiwedd y prosiect cydweithredol cadarnheir cyfanswm y cyllid cyfatebol mewn nwyddau mewn datganiad terfynol, a lofnodir gan gyfarwyddwr y cwmni.

## Amser Staff y Cwmni

Bydd y Ffurflen Cwmpas Prosiect yn amlinellu'r tasgau amrywiol sydd wedi'u neilltuo i bob parti. Yn gyffredinol, gellir cofnodi unrhyw amser a dreulir ar ran y prosiectau ar y taflenni amser.

### Gall y gweithgareddau hyn gynnwys:

- Gweithio gyda Thîm CAff ar y prosiect
- Gweithio ar dasgau prosiect yn annibynnol
- Cyfarfodydd â Thîm CAff
- Amser staff yn dadansoddi cynnydd y prosiect
- Amser staff yn asesu effaith ar y farchnad
- Amser staff yn caffael cyflenwyr neu gleientiaid posib yn gysylltiedig â'r prosiect
- Amser staff yn ymchwilio i, ac ymgeisio am gyfleoedd cyllid yn gysylltiedig â'r prosiect
- Amser staff yn dadansoddi mewnbynnau ac adroddiadau CAff
- Galwadau ffôn mewn perthynas â'r prosiect
- Cyfarfodydd mewnol i drafod y prosiect
- Teithio yn ôl ac ymlaen i gyfarfodydd

## Tu hwnt i brosiect cydweithredol CAFF

I nifer o'n cydweithwyr Diwydiannol, dim ond y dechrau yw eu prosiect cydweithredol CAFF.

Mae prosiect cydweithredol CAFF yn tynnu ar alluoedd cyfatebol gan y cwmni a CAFF.

Gwybodaeth ac Arbenigedd

Canlyniadau

Gall canlyniadau prosiect cydweithredol CAFF arwain at dwf busnes o arbedion cost i geisiadau am grantiau a swyddi newydd.

Mae CAFF yn galluogi sbardunau twf newydd i ddarparu canlyniadau sy'n canolbwytio ar dwf busnes.

Sbardunau Twf

Mae CAFF yn cefnogi datblygu cynnyrch neu broses ar gyfer twf busnes.

Prosiectau Ymchwil a Datblygu

Astudiaetha u Dichonoldeb

Datblygu Proses

Profi a Dadansoddi

Datblygu Prototeip

Cydweithredu

Arenillion Gwell

Arloesedd

Datblygu Rheoli Ansawdd

Sbardunau Marchnad Newydd

Cynnyrch/ Proses Newydd

Arbedion Cost

Ceisiadau am Grantiau

Partneriaeth Prifysgol/ Diwydiant

Twf Rhwydwaith

Twf Busnes

Swyddi Newydd

Canlyniadau