



GUIDELINES FOR PROOF OF CONCEPT PROJECTS Joint HVB and IBioIC Call

All applications must be submitted by 10:00 on Monday, 14 September 2020

Two targeted calls:

- 1. High value biorenewable products or processes for industry projects require industrial support. Funding is available from two sources: IBioIC will provide support to industry-driven projects involving one of IBioIC's <u>academic partners</u>. HVB will support all other short-listed applications.
- 2. Research on high value biorenewables or processes to underpin the creation of new spinouts – projects do not require industrial support but must have the support of their Technology Transfer Office or equivalent. This is an HVB supported call.

Table of Contents

1.	Context	1
	Description of the HVB Flexible Fund	2
	Scope:	2
	Targeted call:	3
2.	Eligibility Criteria for PoC Awards	3
	Applicants:	3
	Finances and duration:	4
	Additional eligibility criteria to be considered for IBioIC funding	4
3.	PoC Application Process:	4
	Application form:	4
	Curriculum Vitae:	7
	Letter of support:	7
	Submission of applications and further information:	7
4.	Evaluation process for applications	7
	Additional IBioIC reviewing	8
5.	Notification of review results	8
6.	Post-award administration	9
	HVB Contracts and agreements	9
	IBioIC Contracts and agreements	9
	HVB Reporting	9
	IBioIC Reporting	9
7.	Data protection and usage	. 10
8.	Conflict of interest guidance	. 10

1. Context

The High Value Biorenewables Network (HVB) is one of six Phase II BBSRC Networks in Industrial Biotechnology and Bioenergy (NIBB) funded for five years from January 2019. HVB aims to:

- Promote discovery, development and application of bio-based chemicals, tools and platform technologies
- Facilitate partnership and knowledge transfer between UK academia and industry
- Provide inspirational leadership to the industrial biotechnology community in the UK and internationally

For this call, HVB have partnered with <u>IBiolC</u> (the Industrial Biotechnology Innovation Centre). IBiolC is part of the Scottish Funding Council's Innovation Centre Programme and connects industry with academic expertise and government to accelerate and de-risk commercialisation, to bring new biotechnology processes and products to the global market. It does this by offering scale-up facilities, talent development, funding provision, networking opportunities and promotion of Scotland's unique assets.

All projects that apply to this call will be considered under HVB's funding guidelines. Any projects that *additionally* meet IBioIC's funding guidelines *and* indicating a wish to be considered for funding by IBioIC, will also be considered by IBioIC for funding.

Description of the HVB Flexible Fund

HVB's Flexible Fund provides a range of awards that support progression of research within the scope of the Network. The total fund value is £1.41M and we anticipate all funds will have been awarded by 2022. There are five types of award:

- Proof of Concept (PoC) for research at TRL 1-4: industry support in terms of cash or in-kind contribution is important, and collaborative, cross-disciplinary projects are preferred.
 PoC projects should aim to do excellent research with impact.
- Business Interaction Voucher (BIV) these are smaller awards for a defined piece of work undertaken by an academic with an industrial partner who should co-fund the project with cash or in-kind contributions. Awards should encourage further collaboration and develop partnerships.
- Sandpit Projects (SP) these are high impact, collaborative projects that respond to well-defined, industrial challenges and targets. Projects will be developed at sandpit events and should include plans for future inward investment.
- Progression Fund (PF) for successful HVB projects close to impact we may invite applications
 to the Flexible Funds for a funded project extension to enable feasibility studies, for example,
 demonstration of scale-up or market analysis.
- Enterprise Fellowships (EF) for an individual to pursue a concept to enable rapid progress towards commercialisation.

HVB has a dual mechanism to identify call areas for PoC and SP projects:

- Pull through Leadership Team and industry identifying industrial challenges;
- ➤ Push through workshops and research inspiring innovative ideas.

HVB assists its members in developing applications to the Flexible Fund. Specifically, funding calls are supported by research-driven workshops, consortium building meetings and networking and annual meetings. In addition, the Network Manager is available to discuss ideas and provide guidance on which funding source might be appropriate. However, we cannot provide advice on which partners you should use to build your consortium.

Scope:

All projects must be in scope of the HVB Network:

HVB focuses on the discovery, development and utilisation of high value, low volume biobased chemicals, tools and platform technologies. HVB embraces a broad scope of biorenewable feedstocks to support innovation in new and existing products across a range of industry sectors.

Applications which have algae as the biological feedstock for a high value biorenewable can be considered by HVB; if such applications are recommended for funding, Algae-UK would be notified of the funding intention. It is unlikely that HVB will fund *research* on algae – such as development of algae production platforms or pathway engineering in algae.

HVB promotes excellent industrial biotechnology research with a strong influence of translational research bridging the gap to application, enabling work to progress to Technology Readiness Levels three to four where it connects with the capabilities of BioPilotsUK or another translational or business development activity.

In addition, all projects must be relevant to industrial biotechnology (IB) as defined by the BBSRC:

IB is a set of cross-disciplinary technologies that use biological resources for producing and processing materials and chemicals for non-food applications. The resources include plants, algae, marine life, fungi and micro-organisms. The feedstocks include renewable materials such as crop residue, animal wastes, food and municipal wastes and perennial biomass.

BBSRC has included the production of anti-microbial compounds and biopharmaceuticals in IB too (see http://www.bbsrc.ac.uk/funding/priorities/ibb-industrial-biotechnology/).

Outside of Scope: Projects that are focused on producing or testing animal feed are not within scope, nor are projects focussing on a single human disease or projects that simply use plant or biological extracts. We do not fund screening projects – we are looking for projects that further develop research outputs along the technology readiness levels.

Targeted call:

There are two concurrent calls for this Proof of Concept round.

- 1. Research on high value biorenewable products or processes for industry. Projects require industrial support of an industrial co-applicant with in-kind or cash contributions. We anticipate that we will fund up to four projects. In addition, IBioIC funding is available for eligible projects.
- 2. Research on high value biorenewable products or processes to create new spin-outs projects do not require industrial support but must have the support of their Technology Transfer Office or equivalent. We anticipate that we will fund up to two projects. This part of the call is for HVB funding only.

If you want to check the scope of your project – submit your abstract to the Network Manager at least a month before the advertised closing date.

2. Eligibility Criteria for PoC Awards

Applicants:

Funding is available for HVB members who are eligible to receive BBSRC funding: this is defined in the BBSRC's grants guide: https://bbsrc.ukri.org/documents/grants-guide/. All applicants must be HVB members at the time of application.

Research Co-investigators may be named on the application, but they need to be based at the same institution as the PI or another Co-I. A Research Co-investigator is a postdoctoral research assistant or equivalent (being ineligible to be either principal or co-investigator in their own right)

who has made a substantial intellectual contribution to the formulation and development of the project, and will be engaged with the ensuing research. This status can be used by the postdoctoral research assistant as evidence of their involvement in acquiring research funding.

Please note: principal applicants who receive HVB Flexible funds to support staff costs would not be eligible to receive support under the BBSRC *New Investigator* scheme.

Finances and duration:

Applications are invited for awards of up to £50,000 at 100% Full Economic Cost (FEC) (i.e. £40,000 at 80% FEC). Projects should have some financial support from industry; this can be a cash contribution or in-kind funding. Industrial support should be from a company with a research or manufacturing base. We may consider projects that do not have industrial support but these will be exceptional.

No more than 20% of costs may be subcontracted; however, facility access charges may be included. Equipment is not an eligible cost.

PoC projects can be any duration up to 12 months.

Additional eligibility criteria to be considered for IBioIC funding

- 1. Proposal must be with a Scottish academic institution.
- 2. Proposals must include an Industry Partner that must make a financial contribution to the project, either in kind or in cash. IBioIC will not contribute more than 50% of the total project costs. E.g. If the full £50,000 funding was requested, contributions will be as follows:

• IBioIC (80% fEC): £40,000

• HEI (20% fEC): £10,000

- Industry cash/in kind contributions: at least £30,000
- 3. If the application is successful, the Industry Partner must become a Member of IBioIC. Please contact info@ibioic.com for details on the benefits of membership and associated costs.

Note on State Aid rules: Aid granted by the Scottish Funding Council funded Innovation Centres constitutes State Aid and is provided under SFC's Innovation Centre Programme 2014-2020 General Block Exemption Regulations Scheme, Reference Number SA. 43342. Further details can be found at: http://www.sfc.ac.uk/innovation/innovation-centres/innovation-centres-state-aid.aspx.. Aid granted by IBioIC will be made under Article 25.

3. PoC Application Process:

There are three documents required for an application:

- Application form which includes the case for support please submit this as a Word document
- CV pdf can be sent
- ➤ Letter of support pdf format

Application form:

Applicants should download and complete the Word document application form: this is designed to capture specific details of the project and for successful projects will form the basis of the final report. The application form requests the following information:

1. Project title

A title for all projects is required.

2. Applicant details and Co Applicant(s):

Name, position, university, e-mail and telephone. A contact person in your Finance / Research Office is also required. When the offer letter is issued, this contact will be copied into the email.

Additional co-applicants may be added as required as well as research co-applicants.

Industrial partner(s) details

Name, position, e-mail, telephone and company. In addition, please supply information on the geographical base, company registration number, the URL for the company website, employee numbers and annual turnover for the last financial year.

3. Public summary of project

You should describe your project in a manner that can be readily understood by a lay audience. Do not include any confidential information as this information will be used by HVB and may be used by the BBSRC for public dissemination if the award is funded.

This section should clearly state **how the project fits within an industrial biotechnology context** because BBSRC will use this information to check that the proposal matches their criteria for NIBB funding. The summary is also used to check with reviewers that they are able to review the proposal.

4. Project dates

Please give reasonable estimates of start dates, allowing time for awards to be made and any necessary paperwork to be completed. You will have up to three months to start the project from the award of the grant. It is anticipated that the offer letters will be sent by the middle of December 2020. If you are unable to meet this timescale please do not apply for funds.

5. Project finances

Complete the table on the form – detailing costs at 100% FEC and 80% FEC. All awards will be made at 80% FEC with the host University responsible for providing the 20% contribution. If there are coapplicants from a different institution, please discuss how the 20% shortfall will be funded before you submit the application.

Write a short justification of costs in the box below. PoC funds are not available to support PhD students unless it is for a short period (depending on their stipend conditions) and they must be under an employment contract for this work. PoC projects cannot be used as part of a PhD, incorporated into results used in a PhD or used to top-up or extend a PhD. You may not fund researchers currently working full-time on BBSRC projects. Equipment purchases are not eligible costs.

Please describe the contribution from the industrial partner – explain how the figure for the total contribution was calculated. For example, include cash contributions or outline how in-kind figures are calculated (daily rates for staff involved, travel costs etc).

Applicants are asked to declare whether they have any association or financial interests with the company named in the application. The Conflict of Interest section of this document (page 7) will help you to define what associations should be declared.

6. Other NIBB2 Funding

Please detail any other applications that you have pending or if you have any funded projects.

You are also required to declare if you have previously had PoC funding from any BBSRC NIBB (including Phase I) for any research related to the current application. Please explain why further PoC funding is required.

7. Technology Readiness Levels

You need to assess your application's current level and what level you hope the funding will enable. If your project is funded, you will be asked to determine the level after the research has been completed. For the BBSRC's definition of TRL 1-5, please see our website: https://www.highvaluebiorenewables.net/funding/

8. Case for Support (up to 5 pages)

Text should be at least single-spaced, 11 point Arial (or equivalent) with a 2 cm margin. Please use the specified headings so that your proposal can be reviewed against the evaluation criteria. Please ensure you cover all aspects, as marks cannot be given if information is missing. References cited and figures should be contained within the five page limit.

Specified headings for case for support:

Context and details of the work proposed
 (quality of science = 40% of the total marks)

Describe background context for the work and any data you have to support your project. Explain what you aim to do and achieve in the project. You need to list any references cited. If you are relying on unpublished work to make your case, you need to provide enough evidence for reviewers to assess your claims. If you are unable to provide data because it is too confidential, your project is unlikely to be funded as we have to be able to assess the scientific quality. If this is the case, please contact us before submitting your application and we will see what we can do to assist you.

Relevance to HVB scope(relevance to scope = 10% of total marks)

Explain what makes the project relevant to HVB and identify the IB elements.

Ethical, economic, environmental and social impact considerations
 (economic, environmental and social impact consideration = 10% of total marks)

Does the proposed work have any ethical implications? If so, please describe how these will be dealt with. What are the economic, environmental and social impacts of the proposed research, explain how you will identify and deal with these aspects. It is highly unlikely that there will be no considerations in this section.

Project management
 (project management = 10% of total marks)

Please indicate how the project will be managed: describe the roles of all partners on the project; list and describe milestones and deliverables, within a timescale. Please identify any critical milestones and explain risk mitigation strategies.

- Impact

(industrial relevance and pathway to impact = 25% of total marks)

Please describe the impact of your project, paying particular attention to the industrial partner(s) or industries you will or hope to engage with. There is no need to attach letters of support from industry – evidence of support should be indicated through financial (cash or in-kind) contributions.

Describe your pathway to impact – how you will achieve the impact you describe.

Curriculum Vitae:

A two-page CV of the principal applicant should be submitted. This CV should include details of relevant publications.

Letter of support:

A letter of support from the applicant's University is required confirming both acceptance of the 80% FEC rate <u>and</u> that the applicant is eligible to receive BBSRC funding. Please do ensure your letter of support covers both these aspects, failure to do so will prevent your application from being reviewed.

Please do not send any additional documents, support from industry should be covered in the application and demonstrated by in-kind funding or cash contributions.

Submission of applications and further information:

Applications should be submitted by e-mail to: hvb-network@york.ac.uk; all applications will be acknowledged within three working days.

Deadline: All applications must be submitted by 10:00 on Monday, 14 September 2020 For further information about the PoC funds, please contact Network Manager, Dr Caroline Calvert (caroline.calvert@york.ac.uk).

4. Evaluation process for applications

i. Initial checks

The Network Manager will check all applications to ensure they are complete. If there are any <u>minor problems</u>, the Network Manager will contact the applicant to request further information or changes, however if this cannot be easily remedied (within three working days) the application will not be reviewed – please ensure you are contactable (or nominate a colleague) during this time.

ii. Scope checks – industrial biotechnology context and relevance to HVB

Applications will be checked for scope; if a proposal is out of scope, a reviewer may be asked to consider the proposal and see if there are any features that would bring the proposal into scope. The BBSRC will have the final decision on scope.

iii. Conflict of interest checks

Details of applicants together with the public summary will be circulated to the reviewers to check for any conflicts of interest.

iv. Review process

For each application, two reviewers will be selected from the HVB Management Board (MB) and Executive Group (EG). Details of the current Board membership can be found on our website: https://www.highvaluebiorenewables.net/about-us/. Review scores and notes are submitted to the Network Manager before the review meeting. If there are large discrepancies in the scores, a third reviewer may be sought. If the third reviewer agrees with one of the original reviewers, the review panel may decide to adjust scores or may disregard scores that do not follow the scoring guidance. Quorum for the review meeting is the Chair plus 5. If a reviewer cannot attend the meeting, the Chair will accept written reviews.

During the review meeting, all applications are discussed (anyone who has a conflict of interest will recuse themselves from the room for discussion of that particular application) and final scores are awarded.

Following review of all applications, a ranked list is used to select applications for funding. Those applications recommended for funding will be submitted to the BBSRC for their final approval.

Review criteria for PoC projects are as follows:

	% contribution to	Threshold level
Criteria	total score	required:
Quality of science and technology application	40	24
Relevance of application to HVB scope	10	6
Industrial support and pathway to impact	25	15
Economic, environmental and social impact	10	6
consideration		
Project management	10	6
Value for money	5	3

For each individual criterion, a threshold score of 60% is required to be considered for funding. At the review panel's discretion, an application could be part-funded, particularly if it is considered that a critical milestone needs to be achieved to fulfil the project. If this is the case, the Network Manager will contact the applicant to discuss the funding offer.

Additional IBioIC reviewing

Projects within IBioIC's remit will undergo a further commercial assessment using two members of IBioIC's Commercial Advisory Board (CAB). The assessment will include:

- Breadth of applicability
- Path to Market
- Benefit versus cost
- Time to market and market appraisal
- Economic impact on project partners
- Governance, Management Processes and Risk appraisal
- Funding profile
- Track record of success

Following HVB technical and IBioIC commercial review, the CAB will meet to discuss the projects and will recommend which projects are suitable for funding to the IBioIC Projects team.

5. Notification of review results

Following the review process, HVB will update the BBSRC's NIBB database with details of all applications to the funding call. HVB will request BBSRC's funding approval for the projects we have shortlisted that are not eligible for IBiolC funding. Once funding approval has been granted, the PI applicant will be notified. IBiolC Projects Team will notify successful applicants for their funding awards.

Unsuccessful applicants will be informed promptly and the Network Manager may pass on specific feedback if the review panel makes this available. We will not offer comprehensive feedback on proposals submitted. Re-submission of proposals is permitted providing the case for support clearly

outlines the changes made to the application, advice should be sought from the Network Manager on how to format re-submissions.

It is anticipated that all Principal Investigators will be notified of the outcome of their application before mid-December.

6. Post-award administration

HVB Contracts and agreements

The University of York will issue a simple contract for the awardee, assigning all rights to the awardee's University. Projects may not start until this contract has been signed. Projects <u>must start within 3 months of the date on the offer letter</u> and the actual start date must be confirmed by email to the Network Manager. Funds must be spent as detailed on the application; virement of funds will not be permitted.

Before a project can start, projects with multiple applicants or industry partners must consider whether a collaboration agreement is required for the project. If required, collaboration agreements must be in place before the project starts and this status should be confirmed by email to the Network Manager.

IBioIC Contracts and agreements

IBioIC is hosted by the University of Strathclyde. Once projects have been awarded, the following documents will be provided and must be returned within 3 months before the project can initiate:

- Signed award letter
- Signed collaboration agreement (a template will be provided if required)
- Full financial plan (academic and industry partner a template will be provided for this)
- Detailed project plan (a template will be provided)

HVB Reporting

At the end of the project, the Principal Applicant will complete a final report form and ask their finance department to complete the expenditure statement form and prepare an invoice. All three items must be emailed to hvb-network@york.ac.uk within six weeks of the agreed end date. There are no alternatives to this reporting process.

Final project reports are checked by the Network Manager and approved by the HVB Executive Group; summaries of the reports are provided to the Management Board.

HVB does not require receipts to be submitted but these must be kept by the host institution as they may be required for possible future audits. The grantee's host institution must follow their standard procedures for financial accounts.

It should be noted that funds are paid by the BBSRC to the University of York in quarterly arrears, therefore invoices could take up to six months to pay.

IBioIC Reporting

IBioIC will monitor projects on a quarterly basis and will request a quarterly report on the technical aspects of the project and details of milestones met. A final report will also be expected with further details of the outcomes and impacts of the project.

Successful applicants will be informed via email and an electronic award letter will be sent to the PI and it is their responsibility to inform and circulate it to the institution's awards/ research office.

Funding for successful projects will be released quarterly and in arrears upon receipt of an invoice from the HEI. Details of in-kind/cash contributions to the project from industry partners will also be monitored on a quarterly basis.

7. Data protection and usage

Copies of applications to the HVB Flexible Fund are made available to the HVB evaluators (members of the HVB Management Board and Executive Group), who use information provided in the application for processing the proposal, the award of any consequential grant, and for the payment, maintenance and review of the funds. All information submitted is held in strictest confidence; the MB all sign a Management Board Agreement that requires their confidentiality.

Information on all applications is added to the BBSRC's database. BBSRC use this information for research related activities, including but not limited to, transfer of funds, statistical analysis in relation to evaluation of the BBSRC NIBB, study of trends and policy and strategy studies.

To meet the Research Councils' obligations for public accountability and the dissemination of information, details of successful Flexible Fund awards may also be made available on the Research Councils' websites and other publicly available databases, and in reports, documents and mailing lists.

IBioIC funding is provided by the Scottish Funding Council. Reports, including state aid reporting, will be provided to the funders under the Government's obligations for public accountability and the dissemination of information. Non-confidential details of awards may also be made available on IBioIC's website, social media channels, reports and documents.

All of IBioIC's assessors with the ability to view project submissions adhere to Confidentiality Agreements and any conflicted parties will not have access to confidential information regarding the proposals they are conflicted over.

8. Conflict of interest guidance

i) For Reviewers:

In cases of conflict of interest for reviewers, there are specific systems in place to safeguard the review process. Any reviewer with a conflict of interest will declare it and will not participate in the review of that application and during the review panel they will leave the room. They may be present for the final discussion of the ranked list (unless they are a named applicant on the application).

In addition, reviewers may declare a conflict of interest if they consider the area of research to be too close to their own research. In this case, they may recuse themselves from review and all discussions of the project.

Examples of a conflict of interest include:

- Employed by the same institution as the applicant(s)
- Actively involved in research collaborations with the applicants(s)
- Working closely with the applicant(s), for example as a co-author or PhD
 Supervisor, or has worked closely in the last 4 years
- Holding a current position on the governing body of or an honorary position within the institution(s) of the applicant(s)
- In receipt of personal remuneration in excess of £5,000 per annum from the applicant's organisation

- Personal/family relationship with the applicant(s)

ii) For Applicants:

All PI or CoI need to declare any conflicts of interest with the named company. This information should be added to the application form under Section 5, Finances.



