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Funding Landscape

April 2021

For further information, including advice, guidance and support on bidding into competitions, please contact us: enquiries@black-kite.co.uk



Our Service



- Black Kite[®] Ltd. is a Technology Business Consultancy, with staff (and associates) who are Innovation Management Specialists.
- We are bid management experts, with experience of writing and assessing bids for many organisations across many different disciplines.
- Organisations of all shapes and sizes (across different technology sectors and market domains) rely upon us to help them prepare convincing bids, and to avoid the pitfalls into which many bidders fall.
- We critically review bids prepared by our clients (new bids, or ones that they may perhaps have submitted unsuccessfully in the past) to help them improve and gain future funding.
- We can work with you to identify and target funding opportunities that will work for your innovation and your organisation.
- Visit our website at https://www.black-kite.co.uk for more details.



Funding Opportunities Highlighted



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How Black Kite[®] can help you to prepare a successful bid:

Black Kite® are specialists in bid management. We have experience of writing and assessing bids for many organisations across many different disciplines. We can work with you to identify and target funding opportunities, help you to prepare a convincing bid, or critically review a bid to improve its likelihood of success.



Innovate UK Competitions: What you need to know

If you are thinking of bidding into an Innovate UK funding competition, Black Kite[®] can work with you to submit a successful bid:

Innovate UK run competitive calls for challenges that they have identified, often based on initiatives coming from Government or Government departments. Not surprisingly, during the past year these have been focused on health and COVID-19 response, but the emphasis is now shifting towards environmental issues and achieving net-zero.

There are some programmes that are ongoing opportunities for higher-risk innovative ideas to get initial funding and traction, such as the SMART programme and the Quantum Technologies calls, but there are also other support funding sources such as SBRI (Small Business Research Initiative) and ISCF (the Industrial Strategy Challenge Fund) that sponsor projects on specific identified application areas.

Gaining funding through these calls is always highly competitive, and only the best bids will be successful. Whilst we cannot guarantee success, Black Kite[®] have decades of experience working with small and large businesses and with academia in collaborative R&D environments, and we can support you at any stage, or all stages, of putting together a grant and project bid.

It is essential that project ideas are presented clearly and in a form that will resonate with bid reviewers / assessors. Black Kite[®] can help you with structuring and presenting your research ideas or innovations; we can perform technology and market reviews, identify research partners and we can critically review your bid before submission. Successful bids must show commercial potential, and we can help you or your investors to understand and quantify the business potential and risks of your innovative propositions, including through targeted technology market studies if desired.



Innovate UK Competitions: General Technology opportunities

SMART January 2021: total £25 m; closes 26th May 2021 (11:00)

- Aim: To support any innovation with significant potential for growth or scale-up, taking customer and user needs into account.
- Addresses Any technological area must be game changing, innovative, ambitious, ready for commercialisation soon after project end.
- Must present a strong business and delivery plan.
- · Must be UK Business-led and must include at least one micro or SME
- A single SME may undertake a short (6-18 month) project, a large project must be collaborative
- 6-18 month projects £25k-£500k, 19-36 month projects £25k-£2m.
- https://apply-for-innovation-funding.service.gov.uk/competition/810/overview, briefing at https://ukri.zoom.us/j/97429875434

• Commercialisation Quantum Technologies: CRD & Tech round 2 : total £46.8 m; closes 28th April 2021 (11:00)

- To advance commercialisation of quantum technologies in UK and increase private sector investment. Projects must exploit 2nd generation quantum technologies.
 These involve the generation and coherent control of quantum states, resulting in phenomena such as superposition or entanglement.
- Two options: (a) Collaborative R&D, and (b) Technologies (solution to an identified technological barrier).
- Business led + an SME. RTOs can collaborate up to max. 30% of project cost.
- Total eligible cost £2m to £20m, total grant request <£10m; 24 36 month projects. Successful applicants interviewed late June 2021.
- https://apply-for-innovation-funding.service.gov.uk/competition/868/overview
- Knowledge transfer partnerships (KTP): 2021 to 2022, Round 1
- Aim: The KTP scheme allows a UK registered business or not-for-profit to partner with a UK HEI, RTO or Catapult to bring new skills or thinking into the business
- Brief Description: Any kind of project can be supported that helps the business with a real need and fits their strategic aims. Researchers linked through this scheme can augment a business' R&D and may subsequently be recruited as employees
- Eligibility: Application is made by the knowledge base entity, partnering with a UK business or NFP, which must contribute financially
- Costs and duration: Typical project costs are £75k per year, a proportion of which is paid by the business partner
- Key dates: This competition closes 14th April 2021 11:00am. There will be further rounds
- Further information: https://apply-for-innovation-funding.service.gov.uk/competition/818/overview#summary
- ISCF Digital Security by Design business led demonstrators phase 1 EOI: closes 26th May 2021 11:00am
- Aim: develop demonstrators of a product or service including security features of safeguards built into the processor architecture and hardware system to make it more secure in the face of a range of security vulnerabilities
- Brief Description: The project must use the DSbD (Digital Security by Design) technology platform prototype and showcase the DSbD approach in order to increase
 the breadth of use-cases against which this technology can be used. Link to DSbD briefing: https://www.dsbd.tech/
- Eligibility: Must be led by a UK business and must be collaborative with another business or research organisation
- Costs and duration: total eligible costs between £1.5M £4m, duration 24 36 months
- Online briefing available at https://ktn-uk.org/events/iscf-digital-security-by-design-dsbd-business-led-demonstrators-phase-1-expression-of-interest-eoi-briefing-event/
- Further information: https://apply-for-innovation-funding.service.gov.uk/competition/865/overview#summary



Innovate UK Competitions - Energy

Are you looking for support to develop your ideas and innovations in energy efficiency technologies?

There are a number of competitions now open looking towards the UK's commitment to net zero in 2040. The next few pages review the opportunities in energy delivery, environmental management, transport and net zero vehicles and advances in aerospace technology. All these competitions are built on the desire to create a revolution in UK competitiveness on the world stage in low carbon and net zero capability, and to enhance the natural environment. At Black Kite[®] we continue to support businesses and research teams helping them to submit convincing and well-presented bids for grant funding and investment to help them towards success in the emerging net-zero world.

- Driving the Electric Revolution: Supply Chains for Net Zero : total £22m; closes: 30 June 2021.
- Aim: to facilitate the UK's niche and volume supply chain and manufacturing capability growth in power electronics, machines and drives
- · Projects must show an exploitable & demonstrable benefit to a UK PEMD supply chain, enabling improvements in productivity, capacity, efficiency
- Must be business-led and collaborative; costs £500k £5m; 18-36 month duration
- Further information at : https://apply-for-innovation-funding.service.gov.uk/competition/861/overview#summary

• IETF deployment of energy efficiency technologies, Spring 2021 : total £40 m; closes: 14 July 2021.

- Onsite deployment of technologies to improve the energy efficiency of an industrial process or processes.
- Grant request > £100 k £14 m; 12 24 month projects.
- Aimed at businesses that use energy or produce direct emissions, Briefing event 8 June 2021:
- https://web-eur.cvent.com/event/729141a4-ed9c-4bcc-af8c-99cafe93f921/summary
- https://apply-for-innovation-funding.service.gov.uk/competition/842/overview#eligibility

• IETF energy efficiency and decarbonisation studies, Spring 2021 : total £40 m (combined with the IETF deployment competition above).

- Feasibility and engineering studies to enable investment decisions in energy efficiency and deep decarbonisation solutions.
- UK business led with or without collaborators. Targeted to a single manufacturing site or data centre.
- Feasibility project costs >= ± 30 k, up to 12 months; Engineering studies >= ± 50 k, up to to 24 months.
- Aimed at businesses that use energy or produce direct emissions as a result of their industrial processes.
- Closes: 14 July 2021. Briefing event 8 June 2021 : https://web-eur.cvent.com/event/729141a4-ed9c-4bcc-af8c-99cafe93f921/summary



Innovate UK Competitions - Environment

Supporting environmental improvement is a key driver for UK innovation investment.

These calls are now open for supporting improvements to the way we use plastics, particularly plastic packaging, and in food production and agriculture. We anticipate that there will be competitions for funding around a range of environmental challenges over the next year or two. Black Kite[®] will keep you up-to-date, and can help you to clarify your ideas and focus your grant bids. We can provide confidential market and technology analysis to improve your chances of success in what is sure to be a very competitive space.

- ISCF Smart Sustainable Plastic Packaging: Business Led R&D : total £40 m; closes: 30 June 2021.
- Aim: To establish the UK as a leading innovator and deliver dramatic reduction in plastic waste entering the environment by 2025
- Projects must make plastics packaging supply chain more circular, and must explain how the UK's plastic packaging system's overall environmental
 impact is reduced
- The project would be a mix of industrial research and experimental development leading to a proof of principle demonstrator
- Available funding: £8m, Project costs £200k £4m; 12 36 month projects.
- Looking to establish R&D projects which are business-led further information at https://www.ukcpn.co.uk/funding/iscf-smart-sustainable-plastic-packaging-overview-future-funding-competitions/

• Farming Innovation Pathways (FIP) – Industrial Research Studies; closes 28th April 2021 (11:00)

- Aim: To develop and support a productive, resilient, and sustainable agricultural sector
- Projects must engage with farmers, growers or producers to explore the potential of early-stage farm-focused solutions solving challenges of
 productivity, sustainability and net zero emissions. Must demonstrate benefits for farmers and help agriculture sector achieve net zero by 2040
- · Can be business-led or research led and must be collaborative
- Total eligible costs up to £250k-£750k, up to 24 months duration. Funding @ 70% SME, 60% medium size, 50% large organisation
- Further information at https://apply-for-innovation-funding.service.gov.uk/competition/852/overview

• Farming Innovation Pathways (FIP) – Industrial Feasibility Studies; closes 28th April 2021 (11:00)

- Aim: To develop and support a productive, resilient, and sustainable agricultural sector in England
- Projects must engage with farmers, growers or producers to explore the potential of early-stage farm-focused solutions solving challenges of
 productivity, sustainability and net zero emissions. Must address at least one of livestock, plant, novel food production, bioeconomy / agroforestry
- · Must be business-led and collaborative or research led and must be collaborative
- Total eligible costs up to £75k-£250k, 12-18 months duration.
- Further information at https://apply-for-innovation-funding.service.gov.uk/competition/853/overview#eligibility



Innovate UK Competitions – Transport-1

Opportunities in the transport sector.

We identify grant funding opportunities for innovative approaches to reductions in greenhouse gas emissions from on and off-road vehicles, aerospace and maritime transport. Transport is seen as one of the key targets for environmental improvement and reduction of greenhouse gas emissions. Black Kite[®] can work with you to structure a clear bid for funding around your innovative technology offering.

- Transitioning towards zero emission vehicles: Feasibility studies and CR&D
- Aim: To fund innovative on-vehicle solutions supporting transition to zero emission vehicles
- Brief Description: solutions addressing: ZEV range capability; increased adoption of small commercial ZEVs; transition to zero emission for special use vehicles; improved ZEV user experience; improved sustainability of ZEVs
- Eligibility: Must be UK business led, collaboration allowed but maximum of 3 partners
- Costs and duration: projects of between £300k-£600k, up to 8 months: 70% small, 60% medium, 50% large
- Key dates: opened 15th March, closes 21st April 11:00 am Briefing event: https://vimeo.com/522858105
- Further information: Call: https://apply-for-innovation-funding.service.gov.uk/competition/869/overview#summary
- Infrastructure solutions for Zero Emission Vehicles:
- Aim: To fund innovative infrastructure solutions supporting transition to zero emission vehicles
- Brief Description: Address improvements in: public residential charging in urban or rural areas, fleet charging or enhance ZEV charging experience
- Eligibility: Must be led by a UK business and must collaborate with other business or research organisation
- Costs and duration: project costs between £300k-£800k, 8 months: 70% small, 60% medium, 50% large
- Key dates: opened 15th March, closes 21st April 11:00 am Briefing event: https://vimeo.com/522858105
- Further information: https://apply-for-innovation-funding.service.gov.uk/competition/873/overview#summary
- Clean Maritime Demonstration Competition Strand 1:closes 2nd June 2021 11:00am
- Aim: to support the design and development of technologies for the reduction of greenhouse gas emissions by the UK's maritime sector
- Brief Description: review technical and economic feasibility of solutions to reduce greenhouse gas emissions and develop demonstrator plan
- Eligibility: Can be led by a UK business working alone or research organisation collaborating with at least 1 business
- Costs and duration: eligible cost between £25k and £1m, duration up to 7 months
- Further information: https://apply-for-innovation-funding.service.gov.uk/competition/888/overview#summary
- Clean Maritime Demonstration Competition strand 2: closes: 2nd June 2021 11:00am
- Aim: support the design and development of technologies for the reduction of greenhouse gas emissions by the UK's maritime sector
- Brief Description: The project must design, develop and test novel clean maritime or smart shipping technologies that reduce greenhouse emissions from vessels and/or from shore-side infrastructure at ports and harbours. Can include autonomous vessels.
- Eligibility: Can be led by a UK business working alone or research organisation collaborating with at least 1 business
- Costs and duration: eligible costs between £100k and £4m, duration up to 7 months
- Further information: https://apply-for-innovation-funding.service.gov.uk/competition/887/overview#summary



Innovate UK Competitions – *Transport-2*

Road freight vehicles are seen as major contributors to pollution.

The UK government seeks innovative approaches to reducing the impact of road freight vehicles on the environment, and are aiming to position the UK as a leader in green, net-zero solutions. If you have an innovative idea or product that you want to take further, Black Kite® can help you to refine your ideas, present a convincing bid and maximise your chances of success in this competitive, but exciting, area.

- Zero emission road freight strand 1: electric road systems:
- Aim: funding ambitious feasibility studies for zero emission road freight demonstration using an electric road system (ERS)
- Brief Description: Must target 44-tonne trucks and consider all practicalities of an ERS system, including use of hybrid systems
- Eligibility: must be UK business led and must collaborate with another business or Research organisation
- Costs and duration: eligible costs between £500k and £2m, up to 9 months duration, grant 70% small, 60% medium, 50% large organisation
- Key dates: closes 5th May 2021 11:00am
- Further information: https://apply-for-innovation-funding.service.gov.uk/competition/884/overview#summary
- Zero emission road freight strand 2: hydrogen fuel cell vehicles:
- Aim: funding of ambitious feasibility studies for a future zero emission road freight demonstration of hydrogen fuel cell trucks
- Brief Description: a fully zero tailpipe carbon emission demonstrator using 'green' hydrogen aimed at 44-tonne trucks
- Eligibility: must be UK business led and must collaborate with another business or Research organisation
- Costs and duration: eligible costs between £500k and £2m, up to 9 months duration, grant 70% small, 60% medium, 50% large organisation
- Key dates: closes 5th May 2021 11:00am
- Further information: https://apply-for-innovation-funding.service.gov.uk/competition/885/overview#summary
- Zero emission road freight strand 3: supply chain technology:
- Aim: supporting advanced feasibility studies and industrial research in supply chain technology for zero emission trucks
- Brief Description: investigation of any disruptive and relevant supply chain technology to support operation of zero emission trucks
- Eligibility: must be UK business led and must collaborate with another business or Research organisation
- Costs and duration: eligible costs between £100k and £250k, duration 9 months, grant 70% small, 60% medium, 50% large organisation
- Key dates: closes 5th May 2021 11:00am
- Further information: https://apply-for-innovation-funding.service.gov.uk/competition/883/overview#summary
- SBRI Zero emission road freight supporting uptake of battery electric trucks:
- Aim: to develop an interactive solution to d-risk, aid and encourage fleet operators to convert to battery electric vehicles
- Brief Description: Create an interactive solution that helps users understand issues around deploying battery electric zero emission trucks
- Eligibility: Any organisation type can work alone or collaboratively; must have access to electric trucks and have support from a fleet operator
- Costs and duration: R&D contract up to £10M, with at least 50% of contract in R&D, duration up to 10 months
- Key dates: closes 21st April 2021 11:00am
- Further information: https://apply-for-innovation-funding.service.gov.uk/competition/881/overview#summary



Innovate UK Competitions – *Transport-3*

These calls are from large funds investing in aerospace and automotive, funded through Innovate UK.

If you are an SME hoping to address the aerospace or low-carbon transport market the NATP call and APC18 call should be of especial interest. Black Kite[®] can support your technology review and bid preparation to ensure you hit the right buttons and maximise your chance of success in these calls. We can provide an honest, direct third-party review of prepared bids and help match your presentation to the call.

• APC18: developing the UK's low carbon automotive capability:

- Aim: In this round the Advanced Propulsion Centre (APC) are investing £25m on projects addressing the automotive market, accelerating development of technologies delivering low and zero tailpipe emissions for on or off-road vehicles
- Brief Description: APC is looking for projects that support the UK's long-term supply chain, capacity and growth. Technologies in scope are: motors; batteries; power electronics; hybridisation; alternative propulsion systems
- Eligibility: Must be led by a UK business, must collaborate with others and must include at least one UK SME. RTO and academic can collaborate
- Costs and duration: Total eligible costs between £5M £40M, minimum of 50% match funded. Duration 18-24 months
- Key dates: closes: 5th May 2021 11:00am, briefing: 30th March 2021; https://www.eventbrite.co.uk/e/apc18-applicant-briefing-webinar-tickets-144426749295
- Further information: https://apply-for-innovation-funding.service.gov.uk/competition/864/overview

ATI Programme strategic batch: expression of interest April 2021

- Aim: This is a large fund (£3.9Bn) supporting and developing the UK's competitive position in civil aerospace, aiming to create a portfolio of projects to meet the objectives of the UK Aerospace Technology Strategy: https://www.ati.org.uk/strategy/strategy-overview/
- Brief Description: This is the unfunded Expression of Interest phase for projects in the civil aerospace sector addressing vehicles, advanced systems, aerostructures, propulsion and power and 'cross-cutting enablers'
- Eligibility: Any UK registered business or RTO can bid singly or as part of a collaboration. A successful EoI is necessary to bid for full stage
- Costs and duration: Up to £18M grant funding, max 50% of total project cost. Duration 'appropriate'
- Key dates: EoI stage opens 6th April 2021, closes 21st April 2021 11:00am, briefing 9th April; https://ukri.zoom.us/j/95422593035#success
- Further information: https://apply-for-innovation-funding.service.gov.uk/competition/867/overview#summary

• NATEP helping SMEs innovate in aerospace – Spring 2021: (call 4 of 6)

- Aim: Support SMEs to develop innovative aerospace technologies in line with the UK Aerospace technology strategy
- Brief Description: projects should show a credible route to market, demonstrate business improvements and show clear technical benefit
- Eligibility: Any UK SME collaborating with other UK business or research organisation. SME should be new to R&D activity
- Costs and duration: total eligible costs between £100k and £300k, duration 12-18 months
- Key dates: opens 6th April 2021: closes 19th May 2021 11:00am: online briefing 14th April 2021
- Further information: https://apply-for-innovation-funding.service.gov.uk/competition/879/overview#summary

Horizon Europe: Update

Are you wondering what is happening with European collaborative projects post-Brexit? Here is Black Kite[®] Ltd's take on it:

The UK has traditionally been a very strong player in European Collaborative projects over the past 35 years during which the Framework Programme has been running. Following agreements reached post-Brexit, the UK Government is hopeful that the UK will continue to play a significant role. At Black Kite[®] we have decades of experience of European collaboration that we can bring to your bid, whether that be in establishing a strong team, identifying key partners, presenting complex technical ideas clearly, structuring a convincing programme of work or performing a critical evaluation of an existing bid.

• Horizon Europe is a seven year programme (2021-2027) with €53.8 bn to spend on Global challenges in health, culture, creativity, digital, climate and food, bio-economy, natural resources, agriculture and environment.

• Latest update:

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- It has been agreed in principle under the trade agreements concluded at the end of 2020 that the UK will be able to participate as an associate partner in EU programmes which includes principally the new Horizon Europe programme being launched later this year.
- The agreement has not yet been ratified and there are some final steps to conclude, however there are no more negotiations to be done and full ratification by the EU is expected by the end of April 2021, with formal association completed by the middle of the year.
- The agreement will ensure that there are equivalent terms of engagement for UK and EU participants, and that UK organisations can lead projects, UK experts can take part in evaluations and the UK will continue to have a role in defining the work programme.
- There are a few provisos, and it's not yet fully clear what impact they may have, if any. Although the UK can access the entire programme and will
 compete for funding in the same way as in the past, the EU retains the option to exclude an associate country from participating in certain actions if
 they have 'duly justified reasons' such as national security. It's not obvious when or if this could be invoked, although it could allow a certain amount
 of political action by some European governments in future.
- The UK government continues to have a role in identifying the work programme, but its role on the governance committee is limited to contribution; it does not have any voting rights, although proposals from this committee very rarely involve voting.
- The UK can participate in Knowledge and Innovation Communities (KICs) run under the aegis of the European Institute of Innovation & Technology (EIT). Further information about the EIT is available at https://eit.europa.eu
- Calls for projects under the EIT KICs have closed for 2021; calls for projects starting in 2022 will open later this year.
- Collaborative projects between UK and European organisations have been very successful in the past, and BEIS are hopeful that UK RTOs, Academic
 Institutions and businesses will engage with the new European research programme. Horizon Europe projects are seen as complementary to Innovate
 UK initiatives, and are expected to open up collaborative opportunities and export opportunities. UK research priorities are not completely aligned with
 those of the EU; there is a new strategy to be published by the UK in the Summer.
- The Horizon Europe work programme has what are described as three pillars Excellent Science, including the ERC and Marie Sklodowska-Curie awards; Global challenges, including the JRC, and the EIC/EIT.
- The National Contact Point network is still in place from pre-Brexit days, and NCPs are available to help and guide those wanting to find out more about opportunities and participation, or lead bids into the Horizon Europe programme. The list of NCPs, and their sectors, can be found at https://www.gov.uk/business-finance-support/horizon-2020-business-grants-uk#find-your-uk-national-contact-point-for-advice



Research Councils

Are you thinking of bidding into an STFC or UKRI call? Black Kite® Ltd can help you target your bid:

There are a number of calls from Research Councils that aim to support academic teams to develop their ideas, often through collaboration with industrial partners or sponsors. If you are an academic research team looking for industrial partners, we can help you to identify the best teaming opportunity, and we can help to refine your pitch to them. If you are a business looking for a research partner in one of the funded areas, we can help with that, too.

• NERC Highlight:

- Research addressing environmental challenges.
- Funding up to £4 m over / up to 4 years.
- Competition opened 30 November 2020, closes 25 March 2021 https://www.ukri.org/opportunity/nerc-highlight-topics/

• EPSRC: Manufacturing the future

- Support for engineering and physical sciences research looking at key challenges facing manufacturing in the UK.
- Includes chemistry and materials.
- Up to £2M
- Open now, no closing date https://www.ukri.org/opportunity/manufacturing-the-future/

• MRC: Infections and immunity programme

- Typically grants of £1 m or more for up to 5 years.
- · Grants within an academic institution.
- Next round opens 9th May 2021 https://www.ukri.org/opportunity/mrc-infections-and-immunity-programme-grant/

• UKRI-SBE lead agency opportunity

- Collaborations between UK and US researchers in any discipline including biotech.
- Submission of EoI to NSF and UKRI for consideration.
- Maximum award £1 m, currently open, no closing date https://www.ukri.org/opportunity/ukri-sbe-lead-agency-opportunity/

• EPSRC: Discipline-hopping in ICT

- Relevant for researchers with non-ICT expertise looking to learn ICT research skills and apply them in their home discipline.
- 3-4 month support of salary and T&S at 80% FEC.
- Now open, no closing date <u>https://www.ukri.org/opportunity/epsrc-discipline-hopping-in-ict/</u>

• BBSRC, ESRC, MRC, NERC, I-UK: EoI: Transforming UK food systems for health and environment

- Academic led, but with industrial collaboration, relevant to production, processing, manufacturing food environments
- Grant funded, £250 k £2 m, closing date for EoI 22 April 2021
- https://www.ukri.org/opportunity/transforming-uk-food-systems-for-health-and-environment/

Black Kite[®] Ltd. has been working with clients across the technology centre for many years. We are well placed to be able to support organisations to access and manage grant funding.

For further information, including advice and guidance on bidding into competitions, please contact Black Kite® at: email: enquiries@black-kite.co.uk

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