

# Energy Innovation Grant Funding Options

Autumn 2020 Update



## Clean Growth Fund (“CGF”)

- Focuses on UK-based companies with commercially viable solutions that are generating early revenues, but also considers pre-revenue businesses with a minimum viable product.
- Criteria for investment are:
  - i. Substantial addressable markets
  - ii. Scalability with a clear sustainable competitive advantage
  - iii. Led by teams that have proven execution ability
  - iv. Identifiable exit route within the lifetime of the CGF
  - v. Clear and significant contribution to reducing greenhouse gases or improvement to resource efficiency across power, transport, industry, buildings, waste and water.
- Typical first round investment tends to be in region of £500k - £3 million, however the fund actively participates in follow on rounds so the overall investment in a company can be much higher.
- Deadline for proposals: **no deadline for proposals currently specified.**



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## Power Forward Challenge: funding for UK /Canada joint challenge on smart energy systems innovation

- UK and Canada are jointly offering over £11 million to develop the best smart energy systems, including grids and storage, for the needs of the 21st Century.
- The Challenge is looking for innovators from any sector who can bring disruptive technologies or new thinking to develop clean, robust and flexible power grids and energy systems that anticipate and meet the needs of networks around the world, looking ahead to 2030 and beyond.
- Funding opportunity 1: Feasibility study development - open to SMEs – up to £60,000 available to UK SMEs.
- Funding opportunity 2: Pilot-scale demonstration proposals - open to companies and other organisations. The project teams can apply for funding contribution of up to £1.8 million per project for demonstration projects located in the UK.
- Deadline for proposals: **no specific deadline on proposals but it appears that a sizeable proportion of funding has already been allocated.**



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## Innovate UK Smart Grants: November 2020

- Investment coming from Innovate UK, part of UK Research and Innovation, the national funding agency investing in science and research in the UK.
- Total investment pot of up to £25 million for “the best game-changing and commercially viable innovative or disruptive ideas”. These can come from any area of technology that can be applied to the economy, but applications are particularly welcomed from projects which overlap with the “Grand Challenge” areas (including AI and the data revolution, and clean growth).
- Projects must satisfy the following eligibility requirements:
  - i. They must include at least one micro, small or medium-sized enterprise, either as a lead or a collaborative grant claiming partner.
  - ii. The project must start no later than 1 July 2021 and end no later than 31 July 2024.
  - iii. Project durations between 6 and 18 months must have total eligible project costs between £25,000 and £500,000. They can be single or collaborative projects.
  - iv. Project durations between 19 months and 36 months must have total eligible project costs between £25,000 and £2 million (although a project exception request may be granted for projects with total eligible costs of up to £3 million). They must be collaborative projects.
  - v. Project leads must be a UK registered business or a research and technology organisation.
- The competition opens on **Thursday 26 November 2020**, immediately following closure of UK Smart Grants August 2020 competition, and closes to applications on **20 January 2021 11:00am**.



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## Horizon 2020 Green Deal Call

- Part of the EU Horizon 2020 energy efficiency funding programme, with a total funding budget of €9 billion. The Green Deal Call represents the final set of topics from this programme.
- Under the terms of the Withdrawal Agreement, UK participants can continue to receive EU grant funding for the lifetime of individual Horizon 2020 projects, including projects finishing after 31 December 2020 when the transition period ends.
- Projects funded under the Green Deal Call are expected to deliver results in 10 areas: 8 “thematic” areas reflecting the key work streams of the European Green Deal; and 2 “horizontal” areas offering a long-term perspective in achieving the transformations set out in the European Green Deal.
- The thematic areas eligible for funding are:

1. Increasing climate ambition
  2. Clean, affordable and secure energy
  3. Industry for a clean and circular economy
  4. Energy and resource efficient buildings
  5. Sustainable and smart mobility
  6. Farm to fork
  7. Biodiversity and ecosystems
  8. Zero-pollution, toxic-free environments
- The horizontal areas eligible for funding are:
    1. Strengthening our knowledge in support of the European Green Deal; and
    2. Empowering citizens for the transition towards a climate neutral, sustainable Europe.



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- You must be either a registered business, charity, partnership or research organisation that has legal standing.
- Funding is available for any of the following project types:
  - i. Research and innovation actions (up to 100% of project's direct costs);
  - ii. Innovation actions, including:
    1. Prototyping;
    2. Testing;
    3. Demonstrating
    4. Piloting;
    5. Market replication; or
    6. Large-scale product validation.  
(up to 70% of project's direct costs if you are a business, or up to 100% funding if you are not-for-profit).
  - iii. Coordination and support actions (up to 100% of project's direct costs) including:
    1. Standardisation;
    2. Dissemination;
    3. Awareness-raising;
    4. Networking; and
    5. Support services.
- If you intend to apply for projects classed as either a "research and innovation action" or "innovation action" you will need to form a consortium with at least 2 other independent legal entities, with each one based in a different EU Member State or Horizon 2020 associated country.
- Applications need to be made through the [H2020 platform](#).
- Deadline for proposals: **26 January 2021**.



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## Faraday Battery Challenge: Innovation Feasibility/Innovation R&D, Round 4

- The ISCF Faraday Battery Challenge will work with Innovate UK to invest up to £10 million in innovation projects across the Feasibility Study and R&D strands of the Faraday Battery Challenge. These will be to support innovation in the design, development and manufacture of batteries for the propulsion of electric vehicles (in all sectors and applications).
- The Challenge is encouraging 2 types of projects:
  1. new projects building on the outputs and outcomes of previously funded Innovate UK projects or activities; and
  2. new projects building on internal activity within the organisation.
- The Challenge is also particularly interested in battery projects that:
  - i. reduce cost at the cell and pack level and in manufacturing;
  - ii. increase energy density of battery cells and packs;
  - iii. eliminate thermal runaway risks;
  - iv. broaden the temperature ranges for efficient operation of a pack;
  - v. develop new models to better predict range and battery health; and
  - vi. next-generation battery technologies in general.



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- The Feasibility strand will invest in business-led feasibility studies (i.e. early stage research) that can catalyse the route to commercialisation.
- The R&D strand will invest in proven battery technologies that show a clear route to market beyond the end of the project, and how to scale the technology for the chosen market, amongst other things.
- Feasibility strand projects will only be eligible if:
  - i. They have total eligible costs between £100,000 and £1,000,000;
  - ii. They plan to end by 31 March 2022; and
  - iii. They last between 3 and 12 months.
- R&D strand projects will only be eligible if:
  - i. They have total eligible costs between £300,000 and £1,500,000;
  - ii. They plan to end by 31 March 2022; and
  - iii. They last between 3 and 12 months.
- All lead project organisations and collaborating organisations must be UK registered.
- Percentage funding of project costs will depend on the nature of the project and the size of the organisation.
- Closing date: **11am, Wednesday 9 December 2020.**



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## Direct Air Capture and other Greenhouse Gas Removals Innovation competition

- This competition's aim is to identify approaches to removing CO<sub>2</sub> or other greenhouse gases from the atmosphere and drive innovation in these approaches. The ultimate objective of the programme is to identify one or more ways in which to achieve removals at the MtCO<sub>2</sub>e scale or greater, at a cost of <£200 per tonne CO<sub>2</sub>e removed, and undertake innovation activities that help to achieve this outcome.
- A 2-phase Small Business Research Initiative ("SBRI") pre-commercial procurement process will be used to deliver the competition, broken down as follows:
  - Phase 1 – Design Phase: this phase will provide an opportunity for successful applicants to prepare detailed designs for piloting their proposed approach and establish the feasibility of those designs.

- Phase 2 – Pilot Phase: this phase will result in the implementation and demonstration of a greenhouse gas removal ("GGR") supply solution in a real-world environment.

Note that Phase 2 of the competition will take forward the most promising designs from Phase 1, therefore applicants must submit an application for Phase 1 in order to participate in Phase 2.

- The competition will be split into 2 lots, each assigned a maximum budget:
  - Lot 1 – "Early stage":
    - up to £6m total funding in Phase 1, with a maximum of £250,000 per project, increasing to £3m per project in Phase 2.



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- Projects in Lot 1 can design and pilot part or parts of a GGR process or, where the applicant believes an end-to-end solution can be successfully piloted by March 2025, the entire process.
- The minimum capacity of a pilot in Lot 1 must be 100 tCO<sub>2</sub>e per annum.
- Lot 2 – “Mid-stage”:
  - Up to £3m total funding in Phase 1, with a maximum of £250,000 per project in Phase 1, increasing to £5m per project in Phase 2.
  - Projects in Lot 2 must have a minimum capacity of 1000 tCO<sub>2</sub>e per annum.
  - Proposed projects in Lot 2 will need to be able to demonstrate an end-to-end solution.
- Competition timetable:
  - The ITT for the competition was published on 9 November 2020.
  - Applicants seeking to enter must submit a registration email and any questions they have prior to making a proposal to [ggr@beis.gov.uk](mailto:ggr@beis.gov.uk) by no later than 2pm, 30 November 2020.
  - Applicants must then submit their proposal by email to the above address by no later than 2pm, 5 February 2021.
  - Phase 1 contracts will be awarded and projects allowed to start from April 2021.



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## Automotive Transformation Fund November 2020

- The Automotive Transformation Fund (“ATF”) is a new programme that aims to establish a competitive and sustainable UK supply chain for electrified automotives.
- The ATF offers a share of up to £1 billion of funding for industrial research and capital investment projects at help industrialise the electrified automotive supply chain at scale in the UK.
- Applications must be for projects with an automotive application. Applicants may submit more than one application for ATF funding. Each application can focus on:
  1. Research and development only;
  2. Capital investment only; or
  3. Both research and development and capital investment.
- Proposals must prioritise the scale up in areas in the Automotive Transformation Strategy. This includes, but is not limited to:
  - batteries;
  - motors and drives;
  - power electronics;
  - fuel cells; or
  - recycling of any of the above.
- Projects that score well against the following criteria will receive funding from the ATF:
  - fit with the overall aims of the ATF;
  - value for money for the UK;



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- ongoing benefit to the UK from the exploitation of your project; and
- project deliverables such as time, cost and quality (including risks).
- Applicants must:
  - be a UK registered business of any size;
  - carry out their project work in the UK;
  - intend to exploit the results from or in the UK; and
  - address the requirements of the ATF.
- There is no upper limit to funding of eligible project costs however:
  - For industry led research projects, total grant funding must not exceed 50% of total eligible projects costs.
  - For capital investment projects, the grant available is dependent on the proposed project and will be determined during the second stage of the application process.
- Competition timetable:
  - The competition is an “expression of interest” competition. Successful applicants in this competition will be invited to apply to one of the full stage competition strands when they are published.
  - The competition closes on **9 December 2020 11.00am**.



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- As part of his “Ten Point Plan” for a “Green Industrial Revolution” announced on 18 November 2020, Prime Minister Boris Johnson set out the following key funding commitments towards energy innovation:
  - an additional £200 million of new funding to create 2 carbon capture clusters by the mid-2020s;
  - up to £500 million will be made available for trialling homes using hydrogen for heating and cooking, starting with a Hydrogen Neighbourhood in 2023, moving to a Hydrogen Village by 2025, with an aim for a Hydrogen Town before the end of the decade. Of this funding, £240 million will go into new hydrogen production facilities;
  - £1.3 billion of funding will be made available to accelerate the rollout of electric vehicle charging infrastructure in homes, streets and on motorways across England, so people can more easily and conveniently charge their cars;

- nearly £500 million is to be spent in the next four years for the development and mass-scale production of electric vehicle batteries, to assist with the transition to ending sales of new petrol and diesel cars and vans by 2030; and
- £20 million is to be allocated for a new competition to develop clean maritime technology.

Further details about the potential funding opportunities these commitments will generate are expected in due course.

- Source: <https://www.gov.uk/government/news/pm-outlines-his-ten-point-plan-for-a-green-industrial-revolution-for-250000-jobs>



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- As part of its RIIO-2 gas and electricity transmission, gas distribution and system operator price controls framework for 2021-2026, Ofgem has set out its proposals for a 5-year investment programme of £25 billion, with potential for an additional £10 billion or more, to transform Britain's energy networks to deliver emissions-free green energy. This includes:
  - £3 billion of funding to be given to connect more green electricity to the grid, and upgrade transmission links to take on more renewable power;
  - At least £630m of innovation funding to be granted to transmission system operators to invest in green energy research and development;
  - Over £500 million in funding to reduce networks' own impact on the environment (e.g. fleet emissions, greenhouse gas emission and resource use and waste); and
  - New potential net zero funds throughout price control, including upgrades and innovation for low carbon heating network infrastructure.

The price controls framework will be implemented from 1 April 2021 and a consultation on the draft determinations closed in September 2020. Details on implementation of the Ofgem funding commitments proposed under the new price controls framework are expected in due course.

Sources: [https://www.ofgem.gov.uk/system/files/docs/2020/07/riio-2\\_draft\\_determinations\\_overview.pdf](https://www.ofgem.gov.uk/system/files/docs/2020/07/riio-2_draft_determinations_overview.pdf);  
[https://www.ofgem.gov.uk/system/files/docs/2020/07/draft\\_determinations\\_-\\_core\\_document\\_redacted.pdf](https://www.ofgem.gov.uk/system/files/docs/2020/07/draft_determinations_-_core_document_redacted.pdf)

- BEIS has committed to publishing its long-awaited Energy White Paper before the end of 2020. The White Paper will include targets for a wide range of low carbon technologies including hydrogen, onshore wind and solar, and a roadmap for how the government intends to reach those targets. It is likely that the White Paper will outline incentives to attract private capital to scale up production, and may also see BEIS consolidate a number of its decarbonisation funding streams into a single pot in order to make the process more transparent for those seeking to access support.

Sources: <https://utilityweek.co.uk/white-paper-to-set-out-wider-renewables-targets/>;

<https://utilityweek.co.uk/how-feasible-is-johnsons-green-industrial-revolution-plan/?query=energy%20white%20paper>

- BEIS ran a call for evidence that closed in October 2020 on the design of the Green Heat Networks Fund, a new £270 million fund due to run from 2022 to 2025 targeted at supporting the development of low-carbon district heat networks. It is envisaged that funding will be specifically targeted at the construction of low-carbon heat generation assets, however there will likely be a mechanism to support pipework infrastructure as well. Further details concerning the new fund are expected following BEIS's analysis of industry feedback.

Source: <https://www.gov.uk/government/consultations/designing-the-green-heat-network-fund-call-for-evidence>



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## Key Contacts



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