INNOVATION FOR ALL AWARD 2027

Information for submitting an entry

Scope

The Worshipful Company of Engineers in co-operation with UK-based charity Tech4All, offers an award for the most creative engineering-based solutions to help those who are disadvantaged or in poverty. The award is intended to encourage engineers to use their skills and expertise to create solutions to alleviate the causes or consequences of underlying issues leading to people being disadvantaged in any way or in poverty.

Sponsor(s): Engineers Trust, Tech4All

Eligibility: Entries must be received by 31 January 2027.

Entrants can be a private individual(s) or an incorporated body that is independent, or part of a recognised body, but financial control processes must be present and openly reported.

Award

A cash award of £20,000 will be paid to the successful person(s) or an incorporated body assessed by the judges to have a realistic prospect of alleviating poverty or hardship. The judges may award substantial discretionary prizes to the runners-up. The cash award will be paid subject to the payment conditions that will be sent to all enquiries received from potential entrants.

Entries will be judged against the following criteria.

- The extent to which the proposed solution addresses the causes or consequences of underlying issues leading to people suffering poverty or hardship across a broad range of areas including, but not limited to, health, mobility, social exclusion, education, banking or location.
- The judges expect the applicants to have identified the evidence as to how the causes or consequences of poverty or hardship can be relieved or mitigated. In particular, the evidence should include how the solution will benefit those who are in poverty or suffering hardship and how that benefit can be or has been measured.
- Projects must be supported by a simple high-level business plan identifying essential immediate cash-requirements, and a self-sustaining future operating model.

The list of award-winning projects illustrates the diversity of technological solutions to alleviate poverty or hardship.

2026

Project - Automated Acoustic Mosquito Monitoring (enstic (GB) Ltd)

Mosquitoes are considered the deadliest animal on the planet, not by claw or venom but by transmission. The pathogens they transfer during their bites cause more than 700,000 deaths every year through mosquito-borne diseases such as malaria, dengue, Zika and yellow fever, and place roughly half the world's population at risk of dengue alone. Tackling mosquito-borne disease is a multi-disciplinary problem spanning urban planning, novel drug development and entomology. But of particular interest here is that, whilst there are roughly 3,500 known mosquito species, only around 3% transmit disease to humans. Knowing exactly which mosquitoes are biting where, and when, is one of the most powerful levers public health teams have in mosquito-borne disease control, yet it is also the lever they can rarely pull in time.

Today, mosquito surveillance depends on physical traps, expert scientists and laboratory capacity that is often physically far from where the mosquitoes actually are. Accordingly, results on mosquito population-trends return days or weeks after the moment they were most useful. enstic was founded to close this gap. By combining engineering with entomology, they have developed a field-ready device family, anchored by their PATRICK acoustic insect monitor and LOOKA portable microscope, to automatically detect mosquitoes, confirm their species and turn wing-beat acoustics (that annoying mosquito buzz) into decision-ready mosquito impact data in near real time, without leaning on scarce laboratory infrastructure.

With the support of the Innovation for All Award, they will run two co-development deployments with established local public-health partners: one in Kenya, focused on the malaria transmitting species, and one in Sri Lanka, focused on dengue transmitting species. Their ambition is to cut the time from sampling mosquitoes to identifying the risks they pose from weeks to under 24 hours. Earlier local intelligence means better-timed and more efficient mosquito control interventions, fewer infections and less pressure on already-stretched health systems. The same enstic platform extends naturally to pollinator monitoring, agricultural pest management and biodiversity surveillance, giving the technology a sustainable path to scale well beyond these first two sites.

2025

Improving health and life expectancy by eliminating household air pollution

It is estimated that over 900 million people in Sub-Saharan Africa, and over 30% of the world's population, cook using open fires or inefficient stoves. Household air pollution kills 3.2 million people (237,000 of whom are children) every year—more than AIDS and Malaria combined. In many communities in Africa, cooking over indoor fires is a cultural tradition, but the smoke causes birth defects, affects eyesight and contributes to chronic illness.

Some of the factors pertaining to current and continued use include:

Cultural practice – this is the way their family has cooked for generations

Taste – food cooked over charcoal has a distinct flavour

Reliability – fuel supply such as electricity or gas in locations such as Sub-Saharan Africa is increasingly unreliable and unstable

Economic – fuel collected from the ground is free in comparison to gas/biofuel/electricity

The development of a prototype chimney in collaboration with local communities has demonstrated a design that is effective, culturally consonant (allowing the use of traditional cooking practices) and simple (able to be made and installed locally). The chimney significantly reduces household air pollution when an open fire is used indoors.

The award will be used to create a sustainable implementation plan, upskilling local communities to encourage long term local manufacturing, sustainability and adoption.

2025

Project – "It's Time to Know''

(Empowering young women through an innovative, low-tech solution)

Globally, there are 1.9 billion women who menstruate, yet their knowledge of their cycle remains low. In Low and Middle-Income Countries, where over 900 million women lack access to mobile internet and most do not use modern contraceptives, this lack of knowledge around the menstrual cycle can lead to unplanned pregnancies, low education attendance, and long-term health implications. Adolescent childbearing in particular is widespread, with an estimated half a million births each year to girls between the ages of 10 and 14 years, and 12.8 million births to adolescents aged between 15 and 19 years.

Promoting women's health has often focused on providing menstrual products. However, these solutions overlook a crucial need: effective menstrual cycle tracking. Traditional methods, like laminated cards or dial necklaces, are rudimentary and static, failing to adapt to a woman's unique menstrual cycle length, and relying on the user herself to do the calculations to determine the phases of her cycle.

IMMI has developed the first low-tech digital watch of its kind that enables menstrual cycle tracking without the need for an app or smartphone. The IMMI watch is designed to learn the user's individual cycle, providing personalised period warnings and an icon to notify them during their most fertile window. This innovation is not just a tracking tool; it's a step towards empowering women with knowledge and control over their menstrual and reproductive health, bridging the information gap in a culturally sensitive and technologically appropriate way.

To date, IMMI has conducted a pilot in Burkina Faso and Moldova with UNFPA which resulted in 9 out of 10 girls saying their lives have changed since wearing the watch. Knowledge of the start date of their period and most fertile window doubled in Moldova and quadrupled in Burkina Faso. Importantly, girls' ability to prepare for their periods also saw notable gains, with many now knowing when to pack pads or underwear in their bags.

2024

No One Left Behind -

Preventing diabetic amputations by early internal soft tissue injury detection

Diabetic foot ulcers (DFUs) pose a severe threat, often leading to amputations and disproportionately affecting individuals in socio-economically deprived areas. This magnifies existing health inequalities and creates a cycle of further disadvantage. This project aims to change the pattern of delayed DFU detection by introducing a novel, objective assessment tool. Early detection is crucial as open wounds significantly increase the risk of infection and amplify tissue damage.

The project addresses a critical gap in existing clinical pathways for diabetic foot care in primary and community settings: the lack of established, objective methods for assessing deep tissue injury.

By applying expertise in soft tissue mechanics, the project developed a unique method for the early detection and prevention of DFU. The project employed integration of automated ultrasound imaging, computer vision, and clinically applicable computer modelling to detect the conditions that lead to DFU before it develops into an open wound.

2023

INDECO : An Integrated Desalination & Cooling System for

Low-Cost, Off-Grid Freshwater & Cold Storage

INDECO is a low-cost, off-grid integrated desalination and cold storage system designed to provide clean water from contaminated groundwater and cold storage for agricultural products in rural regions of developing countries. By utilizing evaporative and solar cooling, INDECO integrates renewable energy, simultaneous clean water and cooling capacity, and low-cost available consumables. INDECO will alleviate poverty by increasing the revenue of small farmers by up to 17% due to food saved from wastage, providing business for local engineering companies in upkeep and maintenance, and improving access to affordable clean water and nutritious foods.

The Innovation For All Award will help the team retire technological risks, build a minimum viable product, and set the foundation for enabling water security, food security, and poverty alleviation by empowering local farmers, business owners, and communities.

800 million people globally do not have access to basic drinking water. 300 million tons of food (enough for 444 million people) is lost annually due to lack of post-harvest refrigeration in developing countries.

The judges recognised the vital importance of the issue being addressed, and its relevance to the alleviation of poverty, and were impressed by the elegance of the engineering behind the concept and the potential impact if it can be deployed at scale. More refinement and market research is required but the judges were unanimous in wishing to see the award being used to take this exciting concept closer to market.

What is Tech4All?

Tech4All is a UK charity based in London that has funded projects with a global impact. It partners with a mixture of private and public sector organisations to help those who are in poverty. Its underlying philosophy is to help people through technology as it believes this provides the most effective way of relieving poverty. From micro-credit and mobile payments projects in East Africa to the latest 3D printing innovations, Tech4All supports and partners with innovators, other charities, and social enterprises.

www.tech4all.org.uk

What is the Worshipful Company of Engineers?

The Worshipful Company of Engineers is a City of London Livery Company that is a fellowship of leading engineers who meet, socialise and exchange cross-disciplinary thinking at prestigious city venues and supports the Engineers Trust in its educational, engineering excellence, and charitable objectives.

www.engineerscompany.org.uk

What is the Engineers Trust?

The Engineers Trust is the charitable trust of the Worshipful Company of Engineers. The Trust acknowledges excellence in engineering, supports engineering education and research, and makes grants that promote innovation including projects that seek to alleviate of poverty,

The Judging Panel

The Judging Panel, including eminent engineers, will be chaired by Professor Gordon Masterton OBE DL FREng FRSE.

How to apply

Entry is through submission of a report demonstrating compliance with the above criteria to innovation4all.award@engineerscompany.org.uk Detailed guidance as to what the judging panel expect to see included in an application is set out below.

Shortlisted entrants will be interviewed online. This can include the display of supporting materials, such as prototypes, videos, and posters. A maximum of three team members can attend the judging session.

Successful entrants will be offered ongoing mentoring support which is valued by past award winners.

What are the timescales?

31 January 2027: Closing date for entries.

14 February 2026: The Judging panel will have reviewed entries and announce a shortlist of a maximum of six entries.

During March 2027, on a date to be advised, judging will take place in person or online.

The winning entrant(s) will be notified not later than 31 March 2027

In June 2027 the award winners will be invited to attend the Worshipful Company of Engineers' Awards Ceremony and dinner at a prestigious venue in the City of London.

The results will be published following the Awards Ceremony.

Detailed guidance on what the application and supporting documentation should contain.

Team Details and History

Team members and contact details, and identification of the lead contact.

Legal formation – whether the team is associated with an organisation or independent and confirmation its place of business is in the UK.

When the project first began, whether there are any assigned intellectual property rights (IPR), and whether the team has received any funding, who from, and whether this was a one-off item or if it is ongoing.

Problem and Summary

Outline the issue(s) the project aims to solve.

Who does it affect? Where? How many? What does this mean for their daily lives?

What could technology do for them? What would this mean? How far along this path does this project aim to go? What would constitute success? What would the next steps be? Explain how it addresses the mission of helping people through engineering innovation.

Project Outline

Provide a clear and coherent description of the project. Describe the competencies and experience of the team members and subcontractors, focusing on the characteristics that are relevant for the project's objectives and deliverables.

Demonstrate the project management capabilities of those who will be running the project, including their ability to manage and implement the project effectively, use resources and allocate tasks reasonably, and ensure that the project's funds are prudently managed and used solely for the project's purposes.

Drawings and models

Accompanying drawings, diagrams, digital graphics and models or prototypes must be referred to and therefore incorporated within the report with an explanation of relevance to the project.

Finance

The entrants must provide a simple high-level statement of current finances.

State financial requirements, and any phasing intended. Demonstrate an economical use of resources. Ensure that the proposed costs are commensurate to the potential outcome of the project. Include all reasonable costs that are essential for the completion of the project. Justify any costs that are higher than prevailing market rates if such expenses are required for the successful completion of the project.

Explain what financial controls will be used to track project costs.

Impact

The application should demonstrate the extent to which the project, or the technology leading from the project, is through its reach, replicability or otherwise, likely to achieve a lasting impact in alleviating poverty in the geography or defined demographic.

Entrants should consider and demonstrate how use can be made of local talent and resources and the extent to which the solution may be able to be applied to other regions or situations.

The judges will take into account that impact may also depend on the scale, geographical scope and types of the proposed project, the capacity and experience of those proposed to run the project, as well as available skills and resources in the local area.

The methodology to support the application's projections for impact should be detailed in the application.

Feasibility and Risks

Projects must propose a feasible approach, and have a realistic implementation plan, where appropriate. The Judging Panel will expect to see evidence that the application has considered the following issues:

- Expected outcomes should be achievable within the indicated time frames and within the project budget;
- Expected outcomes should be measurable and based upon tangible results with defined steps and milestones;
- There should be an assessment of outlined risk factors as well as external constraints potentially undermining the achievement of expected outcomes, including legal and regulatory constraints;
- The readiness of the relevant technology for implementation, if applicable.
- If successful implementation of the project depends on collaboration with a government agency, government officials or any other party (for example, use of a new technology or training materials or provision of data by a third party), this collaboration is technically and legally feasible.
- There should be an indication of potential warning signs of failure, timing, and possible mitigations.

Innovative Step

The project must demonstrate an innovative approach, using new technology or processes and solutions.

Closing

What else might the project rely on, other than money? What are the critical success factors?

Use of IPR and Publicity

There should be a formal plan for sharing the project on an ongoing basis from its set-up through to completion and afterwards, to ensure that others can make use of the innovation. This could include information on your website, attendance at conferences, social media, meetings with relevant government departments and other not for profit and maybe for-profit companies.

(i) Note that the Intellectual Property Rights in all applications remains with the entrants, who agree,
(ii) to allow use of summary details by Tech4all and WCE/ET for publicity purposes and,
(iii) that if they are a winner, to make all endeavours to provide licensing and/or freeware versions available for use in low-income countries in a form that will allow its potential in reducing poverty to be realised.

The involvement of Tech4all & WCE/ET must be made clear on all published material.