



Virtual Sustainable Futures Careers Expo

Visitors Guide



Ground Floor

Here you can find out about the impact decisions we and society make have

Impact of the Clothes We Wear



Here you can find out about the impact of decisions we make about clothes we wear are having on the environment

Impact of the Products We Use



Here you can find out about the impact of decisions we make about the products we use are having on the environment

Impact of the Food We Eat



Here you can find out about the impact of decisions we make about the food we eat is having on the environment

Impact of the Things We Throw Away



Here you can find out about the impact of decisions we make about the things we throw away are having on the environment

Impact of Transport



Here you can find out about the impact of decisions society makes about transport are having on the environment

Impact of Agriculture



Here you can find out about the impact of decisions society makes about agriculture are having on the environment

Impact of Manufacturing



Here you can find out about the impact of decisions society makes about manufacturing are having on the environment

Impact of Energy Production



Here you can find out about the impact of decisions society makes about energy production are having on the environment

Impact of Construction



Here you can find out about the impact decisions society makes about the way we construct building and infrastructure are having on the environment

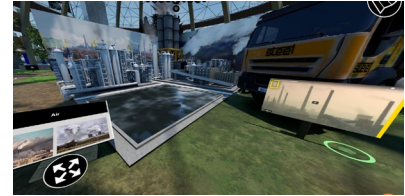
Here you can find out about more about the impact decisions we and society make are having on the Environment, Air Quality, Oceans, Nature and Biodiversity

Impact on the Environment



Here you can find out about the impact decisions society makes are having on the environment

Impact on the Air We Breath



Here you can find out about the impact decisions society makes are having on the air we breath

Impact on the Oceans



Here you can find out about the impact of decisions we and society make are having on the oceans

Impact on Nature and Biodiversity



Here you can find out about the impact decisions society makes are having on nature and biodiversity

First Floor

Stand 1 - Transform-CE Project

Single use plastic, such as packaging, drinks bottles, straws and utensils, contribute to the significant problem of plastic pollution in our environment.

By adopting a circular economy approach, TRANSFORM-CE aims to capture and return single use plastic to the system before it becomes waste or pollution. This €6.93million Interreg North West Europe-funded project focuses on transforming single use plastic waste into value-added products and using two innovative technologies, intrusion-extrusion moulding and additive manufacturing (3D printing).



Stand 2 - CIRMAP Project

The CIRMAP project is using recycled materials to create customisable furniture for public places. Using innovative concrete 3D printing processes, this project explores the potential for turning local construction and demolition wastes into recycled fine aggregate (RFA), which can then be used in concrete mortar mixes as a substitute for virgin sharp sand. By doing so, the project addresses the carbon intensive and ecologically damaging processes of dredging and transporting virgin sharp sand, whilst creating new markets for construction and demolition wastes.



Stand 3 - ShaRepair Project

Consumption of electrical and electronic equipment (EEE), and the resulting production of waste from electrical and electronic goods, is very high throughout North-West Europe.

The ShaRepair project is developing a digital support infrastructure for citizens in the repair economy.

ShaRepair aims to support and help scale the citizen repair movement through the promotion of innovative technologies, such as computer aided design and 3D printing, for the production of spare parts and components. The project is also developing digital tools and resources, including an open-source database of 3D-printable designs.



Stand 4 – Video - Revolutionary Shoe Recycling Program

With the creation of their unique CloudTec® technology, which provides runners with responsive, multi-directional cushioning in their footwear, On was a brand already doing things differently. Now they're taking this commitment to innovation even further: From the Cloudbneo to the launch of their Cyclon program — a recyclable shoe subscription service — the team at On is pioneering exciting changes in the performance sportswear industry

Stand 5 - HagenHinderdael

Pairing product design with art, HagenHinderdael are an award-winning creative practice who work at the intersect of sustainable design and innovative technology to create sculptural products and immersive installations. Merging sustainable materials with traditional craftsmanship and innovative technology, they produce elements, feature installations, and placemaking schemes that push the boundaries of engineering whilst bearing the incentive of a continuous afterlife.



Stand 6- EDGE

EDGE (Eco Design Green Environment), a showroom for sustainable design and building materials in the heart of London, is committed to inspiring and supporting positive change to the ways in which we design and construct built environments. A central hub providing project solutions including recycled materials, heat pumping systems, biodegradable materials all while working with experts and providing educational events.



Stand 7 - WRAP

WRAP is a climate action NGO working around the globe to tackle the causes of the climate crisis and give the planet a sustainable future. We were established in the UK in 2000; we now work in 40+ countries. We must stop wasting our natural resources. Everything we use should be re-used and recycled. We can help you to protect the planet by changing the way things are produced, consumed, and disposed of. WRAP's vision is a thriving world in which climate change is no longer a problem. Our mission is to make the world a more sustainable place. We bring people together, we act on the facts, and we drive change.



Stand 8 – Video - When Trees Meet Buildings

Architects, engineers and developers are creating increasingly greener structures - and doing it in a more literal way than ever before

Stand 9 – Video - Small Robot Company – Non-chemical weeding

Small Robot Company is on a mission is to help farmers feed the world while regenerating the planet. Their sustainable farming robots Tom, Dick and Harry will deliver Per Plant Farming for the world's biggest food crops. Hound Dog Films were back working with Small Robot Company to produce this non-chemical weeding demonstration which shows the power of Per Plant Farming.

Stand 10 – Video - The True Impact Of Vegan (Plastic) Leather - Cheddar Explains

With the rise of the environmentally conscious consumer and veganism, fashion brands have looked for new sustainable fashion trends. Or at least, products that can be marketed as green. So, is vegan leather actually green, or is its environmental impact equal to - or worse - than real leather?

Stand 11- Keele University

We are living through a climate emergency. At Keele we're leading the sector in sustainability, not just in our ambitions to become carbon neutral by 2030 but also through our teaching and our ground breaking research into climate change and renewable technologies.



Stand 12 – Reaseheath College

UCR graduates are transforming the land-based industries through purposeful careers that enhance sustainability and nurture our environment. Now it's your turn. Join our welcoming community and share diverse ideas. Explore leading edge facilities on our stunning campus. Get to grips with the latest technology and get closer to industry with inspiring lecturers, all experts in their fields. We care about our world and your future. Together, we'll turn your passion into insight, innovation and success. We'll give you valuable hands-on experience in the lecture theatre, the lab and the great outdoors. You'll develop the deep knowledge, practical skills and confidence that employers really want.



Stand 13 - Habitat Matters

Habitat Matters is a project that aims to help protect ecosystems and habitats within urban and semi-urban environments. It is an ambitious plan but one we believe can make a difference. The continual creep of urbanisation has had a huge and damaging effect on our nation's nature and its ecological infrastructure, though, fragmentation, degradation, and loss of natural habitats. Careful planning, design, construction, and management of the urban built environment can help construct and support a diverse range of habitats, mitigating species decline and actively protecting, enhancing, and creating diverse eco networks. Whilst also establishing a connection between us and nature for our collective prosperity.



Stand 14 – Video - How to Clean an Ocean

How can we prevent plastic from polluting our oceans? In this video, we go over a possible solution for cleaning our oceans! For more Tech and The Ocean Cleanup content be sure to subscribe to Tech World! Thanks for watching this video: [How to Clean an Ocean](#)

Stand 15– CURA Design

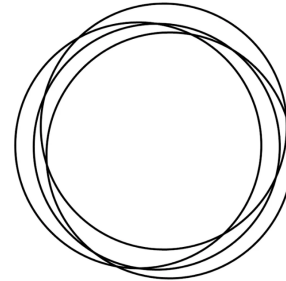
Cura Design provides architectural design services for residential, commercial, healthcare, and cultural projects with our relationship to nature as the core design value, the driver and generator for creating a new type of built environment. Biophilic design endeavours to: First protect and enhance nature and biodiversity wherever a project is being built (ie to increase the green plot ratio for a site) and second, to increase human well-being through a better connection with nature and our surroundings. Cura Design, (formerly Research + Design) received the Alan King Award in 2009 for technical excellence and Plymouths Abercrombie Award in 2011 for 'Best Minor Development and 2017 for Best Community Project.

The logo for Cura Design features the words "Cura Design" in a teal, serif font.

Stand 16 - Samer El Sayary Architects

Samer El Savery's work is exhibited in several countries including NASA Johnson Space Center in Houston (USA) 2019, Medcop 21 France 2015, United Nations Office For Outer Space Affairs (UNOOSA) 2021 & Paris 2016, Greece 2015, Tunisia 2011, Egypt 2011 & 2013, Malaysia 2019.

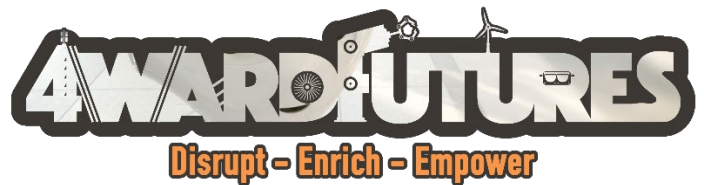
His work has also been featured in the Discovery channel UK documentary, Dutch TV, California Dreamers channel, Wired magazine 2017, Up-magazine and L'arca magazine, Architecture d'aujourd'hui special edition 2021, Fiabci 2020, universetoday.com, designboom.com, archdaily.com, spacearchitect.org among many others.



S A M E R E L S A Y A R Y

Stand 17 – 4wardFutures

4wardFutures (4FC) is a careers education charity operating in England and Wales. The charity works to empower young people of all backgrounds to take control of their future career and progression opportunities by engaging with employers, universities and professional organisations against the backdrop of a world that is rapidly changing through the impact of innovation and technology.



2nd Floor

Stand 1 - Gravitricity

Gravitricity is a UK based engineering company developing a gravitational energy storage technology for network-constrained users and operators, distribution networks and major power users. Our patented technology is based on a simple principle: raising and lowering a heavy weight to store and release energy.



Stand 2 – Cornish Lithium

Cornish Lithium aims to produce lithium and other critical metals using environmentally responsible, low carbon methods. The Company also aims to produce zero-carbon heat from geothermal sources in order to enable Cornish businesses to reduce or eliminate dependency on fossil fuels thus enabling profound economic benefits for Cornwall as whole.



Stand 2 – Engineering UK

Engineering UK aim to Inspire more, and more diverse, young people into engineering.



Stand 4 – Video - How 6 Million Pounds Of Electronic Waste Gets Recycled A Month

Only 17% of electronic waste is recycled. That's because devices aren't designed to be recycled. They're full of tiny, toxic materials that are hard and expensive to break down. But if extracted safely, those materials could mean big money for e-recyclers like Sims Lifecycle Services. We visit Sims' Tennessee recycling facility to find out why e-waste is getting harder to deal with.

Stand 5 – Material Focus

Recycle Your Electricals is a UK-wide campaign motivating and making it easier for everyone to reuse and recycle unwanted electricals, ensuring we make the most of the valuable materials in them. The campaign is led by Material Focus, formerly called the WEEE Fund.



Stand 6 - SUEZ

We employ more than 5,000 people in the UK. Since 1988, we have been managing waste and water for our local authority and business customers. Today, we are pioneering sustainable solutions and innovative technologies for the UK's circular economy.



Stand 7 - STFC

STFC's mission is to deliver world-leading national and international research and innovation capabilities and, through those, discover the secrets of the Universe. Our major research and innovation campuses at Harwell, Daresbury and research facilities across the UK support fundamental research in astronomy, physics and space science. The Green Walls Feasibility Study was an environmental sustainability project taken on by 10 graduate engineers and data scientists.



Stand 8 – Video - 10 Eco-Friendly Building Materials | Sustainable Design

Here are some alternative and eco-friendly building materials which can replace concrete and steel. These sustainable materials come from sources you would never have thought such as seaweed, mushrooms and even coffee. They allow designers and engineers to construct green buildings with a low carbon footprint.

Stand 9 – Video - How product design can change the world | Christiaan Maats | TEDx University of Groningen

Christiaan Maats is a designer and entrepreneur who challenges the way we look at product design. Going beyond form and function he shows us how products carry deeper layers of meaning and how those layers can connect us to a bigger reality. In this Talk, Christiaan Maats explains how meaningful products can embody the change we want to see in the world and sheds light on his own vision of a circular society that integrates industrial society with its natural roots.

Stand 10 – Video - How Fish Skins & Flip-Flop Statues Could Help The Fashion Industry Tackle Its Massive Waste Problem

From turning old flip-flops into art, to making sneakers out of old plastic bags, these businesses are where fashion meets worldwide waste.

Stand 11 - Adaptavate

Adaptavate is re-thinking and re-designing the way building materials are made. We are innovating and designing low-carbon materials for healthy buildings and people. Adaptavate's values come from the founders' personal principles and are strongly rooted within the company, informing and guiding all business decisions. We want to work with like-minded people, both in Adaptavate and in other companies. We love what we are doing and want to share what is important to us with you.



Stand 12 – The Last Puzzle Piece

Innovation consultancy that combines creative, technical and user experience expertise to deliver world changing products and services for medical, consumer and industrial clients.



Stand 13 – Graphenstone Paint

Graphenstone; Creating 100% natural sustainable 'harm-free' mineral paints, fused with graphene, the strongest material on earth. Awarded Cradle to Cradle Gold certification, our unique product range purifies the air, capturing CO₂, with ultra-low VOC's, offered in 1000 beautiful rich matt colours. Graphenstone; Beyond Colour.



GRAPHENSTONE®

Stand14 – Video - What is Green Hydrogen?

Stand 15 - Enviroo

Enviroo's mission is to change behavioural habits of plastics users to ensure plastic does not enter oceans and landfill. We advocate responsible recycling that creates unity amongst all circular economy stakeholders, thus ensuring 100% of PET plastic waste is recycled.



Stand 16 - The Institution of Chemical Engineers

Founded in 1922, the Institution of Chemical Engineers (IChemE) is a multi-national institution with primary offices in the UK and Australia. We exist to advance chemical engineering's contribution for the benefit of society. IChemE members can be found in a wide range of industry sectors, and at different stages of their careers. They play a key role in our governance and day-to-day operations. IChemE is led by members, supports members, and serves society.



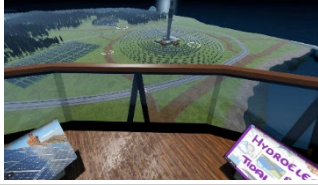
Stand 17 – Royal Society of Chemistry

The Royal Society of Chemistry's purpose is to advance excellence in the chemical sciences – to improve the lives of people around the world now and in the future. We are the professional body for chemists in the UK, and an internationally renowned publisher of high-quality chemical science knowledge. We support and represent more than 50,000 members and an international community.



Sustainable Futures Expo – Outside Areas

Viewing Platform



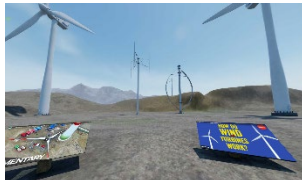
From the viewing Platform you can move between the different areas of the Expo

Solar Farm



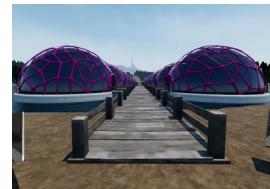
Here you can find out about how energy can be produced using solar panels and mirror arrays

Wind Farm



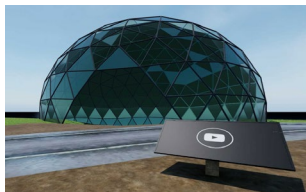
Here you can find out about how energy can be produced using wind turbines

Project Galleries



Student project work will appear in these exhibition domes from CASLOE, CASLOE-CS and EASLOE projects

Ocean View



Here you can find out about how energy can be produced from the ocean

Exhibition Dome



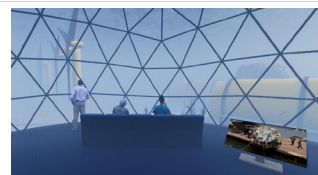
This is the visiting exhibition dome. Currently you can look some work by students from Staffordshire University who have been working on a sustainably project

Peat Bog



Here you can find out about the important Role peat bogs play in helping to address climate change

Under Water View



Here you can find out about the technology systems that are used under water