

About the #GreenHack_Challenge

The Centre for Sustainable Design® (CfSD) devised and led the #Greenhack_Challenge® (GHC) at the University for the Creative Arts (UCA), Farnham on March 4th and 5th 2014. The event was designed to bring together FUSION SMEs and other businesses with designers, academics and FUSION pre-startup postgraduate students from a range of creative disciplines from School of Craft & Design (SoCD) at UCA. Seven companies, presented real sustainability / circular economy challenges related to their products or services. Thirty three delegates (including 15 UCA students on the FUSION prestart-up programme on day 1 and 13 on day 2) took part in the 1.25 day 'open innovation' workshop and formed teams to develop solutions to these challenges. Solutions were presented at the end of the second day to all delegates and feedback was provided to Challenge Teams by an expert panel. The Seven challenges and challenge owners are listed below.

1. Closed Loop Packaging – Rapanui Clothing Ltd (**Start-up FUSION beneficiary**)
2. 2nd Life Everyday Objects – Computer Agents Ltd (**Transition FUSION beneficiary**)
3. Smart Consumer Electronics – Ifixit corporation
4. Sustainable Plant Pots – Lettuce Flowers Ltd (**Start-up FUSION beneficiary**)
5. Circular Innovation Hub – One Planet Ventures Ltd
6. Zero Draught – Nigel's Eco-Store (**High Growth FUSION beneficiary**)
7. Sustainable Laundry – Unilever plc

A [video summary of the GHC](#) is available on the CfSD website. After the GHC CfSD provided each challenge owner with a GHC design outcomes document and each has been contacted directly by CfSD to determine their interest in further development of designs through the FUSION project.

Support received through Fusion

In January 2014 all CfSD FUSION beneficiaries were contacted to determine which companies had a real business need for support on sustainable product /service design that they were willing to present as non-confidential challenges at the GHC in March. CfSD worked with four FUSION SMEs to develop design briefs that could be addressed by challenge teams over the duration of the 1.25 day workshop.

FUSION SMEs agreed written design challenge briefs and presented these to delegates either in person or via live-link on Day 1 of the GHC, after which delegates organised themselves into challenge teams to work on their chosen challenge on Day 2. The seven challenge teams were provided with advice and feedback throughout Day 2 by experts from CfSD, the *Environmental Sustainability Knowledge Transfer Network* and *We All Design*, an independent Design Consultancy.

Satisfaction ratings from the post event questionnaire were excellent (average rating was 80%).



Delegates found the creative process and opportunity to network with creative students, FUSION beneficiaries and other companies of real value.

"GHC offered an excellent opportunity to work collaboratively with students and experts from many disciplines. GHC proved that imaginative, sustainable answers to problems can not only be easily achieved with collaborative thinking in a very short space of time, but it can also be great fun in the process."

Ben Smart, MA Design student, one of the fifteen student delegates supported by CfSD under its FUSION pre-startup programme

Outcomes

A [#GreenHack Challenge Report](#) which summarises the GHC process and the design outcomes for each of the seven challenges has been viewed by over 3,360 (August 2014).

Challenge owners were grateful for the new insights on sustainable product/service design.

"Great to be involved with the #Greenhack_Challenge and see the ideas that came from it"

Rob Drake-Knight Co-founder, Rapanui Clothing Ltd, Start-up FUSION beneficiary

CfSD continues to work with FUSION challenge owners to explore opportunities to progress design outcomes through the FUSION project.

Lettuce Flowers Ltd, a FUSION beneficiary that designs, produces and sells edible plant displays is expected to

progress the solutions presented to its challenge to design 'Sustainable Plant Pots'



"#GreenHack_Challenge gave Lettuce Flowers a focus on developing new sustainable planters through further collaboration with the students. We hope to engage one of the students with this in mind, as we were thrilled with their designs"

Sushma Windsor, Founder, Lettuce Flowers Ltd, Start-up FUSION beneficiary

Lessons learned

- The *#GreenHack_Challenge* was built with the benefit of experience from over 60 green innovation workshops previously organised and run by CfSD.
- The 1.25 day process enabled the development of tangible early stage prototypes within a relatively short timescale.
- Delegates valued the collaborative approach to working, irrespective of whether they were UCA students prestart-up beneficiaries, academics, SMEs or designers they enjoyed working together in cross-disciplinary groups.
- It is important to allow enough time with challenge owners to develop concise and specific briefs
- Creating a positive atmosphere is very important for an 'open-innovation' workshop, eg adequate working space, room layout, access to the internet for research, provision of materials and equipment, eg glue guns, modelling materials.
- The GHC also demonstrated how important it is to cultivate a fun working environment. This was helped through the design of exercises as part of the managed process of innovation. For example challenge teams drew up their design milestones time plan on balloons, popping them as each milestone was reached.
- The GHC was a novel means of bringing together FUSION beneficiaries, with designers, academics, students, SMEs and large businesses to work on real sustainable design challenges. At least one of the four FUSION beneficiaries that set a challenge is expected to actively progress the solutions presented.

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