

## Lessons Learnt from Supporting SMEs through the FUSION project 2012 – 2014

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### Introduction

Since 2009, [The Centre for Sustainable Design® \(CfSD\)](#) at the University for the Creative Arts (UCA) in Surrey, UK has provided business support to six hundred and fifty three eco-innovative SMEs in South East England as part of three European Commission (EC) funded projects, EcoMind, SUSCIN and FUSION. Between 2009 and 2012 CfSD led and supported 566 eco-innovative SMEs through the Sustainable Supply Chains through Innovation (SUSCIN) project, funded through the European Regional Development Fund (ERDF) and the South East England Development Agency (SEEDA) – now the Department of Communities and Local Government (DCLG). In parallel to SUSCIN between 2009 and 2011 CfSD supported 30 SMEs in more depth through the INTERREG IVA '2 seas' Environmental Market and Innovation Development (EcoMind) collaborative project. A detailed exploration of activities and learnings from SUSCIN and EcoMind is provided in [Lessons learnt supporting SMEs on Eco-Innovation, 2012](#). Under the FUSION project between 2012 and December 2014, CfSD provided intensive support to 57 eco-innovative SMEs in Kent, East and West Sussex, Surrey, Hampshire and the Isle of Wight. The work was co-funded under the INTERREG IVA '2 seas' FUSION collaborative project. This report summarises the activities undertaken by CfSD as part of the FUSION project and shares the findings and lessons learnt and draws on the learnings from SUSCIN and EcoMind.

The FUSION project aimed to encourage the region's economic and environmental growth through innovation in Small and Medium Sized Enterprises (SMEs). As one of nine delivery partners throughout the '2 seas' region (SE England, Northern France, Belgium and Holland) CfSD aimed to achieve this through the provision of tailored business support to entrepreneurs seeking to start, change and grow enterprises while taking into consideration the environmental and social impacts of their businesses. CfSD worked with pre-startups and SMEs whose business models, products and services were judged to be eco-innovative. Fifty-seven SMEs (36 pre-startup and startup, 15 transition and 6 high growth) were recruited as FUSION beneficiaries, using a range of marketing techniques, including email to CfSD's extensive network of SMEs in the South East of England, invitation to events, word of mouth and referral from CfSD's wider network. The SMEs comprised of product designers and inventors, distributors, consultants and service providers, in a wide range of sectors including Fashion, Energy management, Financial Services, Construction, Cleantech and Environmental Technologies.

## **Support Activities**

### **One to One Business Support**

Each SME was offered a notional 40 hours 1:1 support by CfSD and bespoke action plans were prepared during face-face consultations with each SME. A total of 1,710 hours of 1:1 support was provided by CfSD to FUSION SMEs. The form of support varied considerably, but in the main was a combination of mentoring, research provision and knowledge transfer on subjects including eco-innovation, funding, market intelligence, emerging trends, marketing, product R&D and potential third party collaboration. Support was delivered through SME attendance at 'open' workshops, face to face meetings, telephone discussions, email and the preparation of bespoke research reports, in response to SME's specific needs. CfSD produced twenty-four bespoke research reports and two cross-cutting reports available to all beneficiaries; Crowdfunding for Eco-Innovators and Funding for Eco-Innovative SMEs in South East England. Support was also provided to ten SMEs via CfSD's [Greenthink©](#) workshops to explore new business ideas using a range of CfSD creative tools and the Business Model Canvas.

### **UCA Prestart-up programme**

CfSD increased its focus on pre-startups in early 2014 with a support programme aimed specifically at UCA postgraduate creative and design students. The increased focus on UCA prestart-ups was in response to the perception that a growing number of students were motivated by sustainability and a desire to go on to establish their own businesses. Forty-nine UCA postgraduate students in four groups were taken through a series of ninety minute workshops and one-day intensive 'bootcamps' for pre-startup eco-entrepreneurs. Seven workshops and four 'bootcamps', covering topics including Business Opportunities for Creatives in the Circular Economy, Disruptive Business Models, intellectual property, company legal status and start-up planning, as well as exercises using the Business Model Canvas and CfSD tools on assessing Product Lifecycle Impacts and the Eco-design Strategy Wheel. As a consequence of participation in the UCA Prestart-up programme twelve students registered as FUSION pre-startups beneficiaries.

### **Workshops and webinars**

Twenty events including [webinars and workshops](#) on subjects requested by FUSION beneficiaries were organised and delivered by CfSD. CfSD and Dutch FUSION partner ENVIU worked together to develop webinars to enable UK based SMEs to and Dutch SMEs to learn and share together. Two cross-border webinars on Crowdfunding for Eco-innovators were held in 2012 and attended by eighteen CfSD FUSION SMEs and SMEs from the Netherlands. Seven workshops were also delivered mainly on the subjects of funding, entrepreneurship and business opportunities and innovation in the circular economy. New approaches to open-innovation were developed, like CfSD's [#Greenhack Challenge](#) which brought together FUSION beneficiaries, businesses, designers and students to work on real sustainable design challenges from seven companies, including four CfSD FUSION beneficiaries. One of the FUSION start-up beneficiaries, working with a postgraduate student on the UCA pre-startup programme has gone on to develop a prototype biodegradable product as a consequence of outputs from the #Greenhack Challenge.

The CfSD FUSION workshop [Makers & Fixers; Grassroots Innovation and the Circular Economy](#) was attended by 82 delegates including FUSION beneficiaries, SME and amateur makers and fixers, policy makers, students, academics and other stakeholders. The workshop was selected by the EC Directorate General Environment to be a satellite event of the Europe-wide [GreenWeek 2014](#) on the theme of circular economy, resource efficiency and waste. CfSD presented its research [Grassroots Innovation and the Circular Economy; A Global Survey of Repair Cafés and Hackerspaces](#) at this event. The research aimed to document the importance of sustainability as a motivator for those taking part in community workshops and in the choice of activities undertaken as well as exploring the potential that Repair Cafes and Hackerspaces present for developing future eco-innovative businesses. The research was undertaken as part of CfSD's contribution to the FUSION Observatory, an element of the FUSION project concerned with research and policy recommendations.

## Results and Outcomes

In September 2014, SMEs were asked to complete a short online survey to detail the benefits derived through CfSD FUSION support. Twenty one SMEs completed the survey. Results are given in table 1. Those responding to the closure survey were all businesses that had received in excess of 40 hours 1:1 support. Amongst those that did not respond, twelve pre-start-ups had not commenced trading prior to the end of the project and four SMEs (3 start-ups and 1 high growth) had either ceased business or sold their business, during the course of the FUSION project. The key points of contact for FUSION at a further three SMEs had left to pursue other opportunities and no response was received. Of the remaining seventeen businesses that did not complete the closure survey, the majority provided verbal or brief feedback via email, but it did not prove possible to elicit quantitative feedback in the form given in table 1.

**Table 1. Summary of support provided by CfSD to all FUSION SMEs and outcomes of FUSION support as reported by SME beneficiaries in response to the closure survey completed by twenty one SMEs in September 2014**

<b>FUSION Support and outcomes</b>	<b>Pre-startup &amp; Startup SMEs</b>	<b>Transition SMEs</b>	<b>High-Growth SMEs</b>	<b>Sum of all SMEs</b>
Number of FUSION beneficiaries supported by CfSD	36	15	6	57
Hours of 1:1 business support provided by CfSD	1,013	500	198	1,710
Number of FUSION beneficiaries responding to closure survey	11	6	6	21
Funds raised (public & private)	£2,090,000	£163,000	£20,000	£2,273,000
Total new jobs created	8	15	2	25
Reduction in annual electricity consumption (kWh /year)		150,000		150,000
Reduction in annual carbon dioxide emissions (tonnes CO2 equivalent /year)	200	30		230
Reduction in annual waste generated	1,000			1,000

year (tonnes / year)				
Reduction in annual water consumption (litres / year)	4,000			4,000

Advice provided by CfSD contributed to SMEs raising some £2,273,000 of funding for growth, research and development and the creation of 25 new jobs (8 of which were internships). Product-related support on life-cycle thinking and eco-design contributed to some significant reductions in environmental impact. Despite the success of some businesses in raising funds, most SMEs and in particular startups encountered cash flow challenges and a lack of available funds for research and development. A great deal of advice was provided in these two areas with some notable successes in securing R&D funding. Although two businesses each went through the complicated process of securing public funding of up to £80,000, the majority who secured public funds did so through the considerably less complicated application process for Innovation Vouchers from Innovate UK. Although cash flow was a recurrent issue for some small businesses, none are known to have failed for this reason during the period of support.

**Table 2. The main benefits of FUSION support as ranked from a list of options by 21 SMEs in response to the FUSION closure survey in September 2014. Items ranked first are valued higher than the following ranks, the score is the sum of all weighted rank counts.**

Benefit of CfSD FUSION support	Rank	Score
Networking with other SMEs	1	115
Awareness of emerging trends	2	111
Introduction by CfSD to potential third-party collaborators	3	93
Identification of new business opportunities	4	92
Awareness of funding opportunities	5	70
Business model planning	6	62
Reducing the environmental impact of business	7	31
Increased sales	8	22
Cost reduction	9	14

Networking with other SMEs was seen as being the greatest benefit of FUSION support. Sharing experiences and simply being amongst other entrepreneurs is of great value to SMEs, particularly for those just starting a new business. CfSD had a key role in facilitating connections between SMEs with similar or complementary interests and in catalysing collaboration around new ideas, through raising awareness of new and emerging issues. Providing space and time for networking and group discussion was a key part of all of the workshops organised by CfSD. CfSD is also aware of at least twenty instances where SMEs have been introduced by CfSD and gone on to collaborate or explore new business opportunities together. One SME went on to develop a prototype of a new biodegradable product with design input from a pre-startup entrepreneur after being introduced at CfSDs #Greenhack\_Challenge workshop in June 2014. The prototype is undergoing further refinements, but the business expects to be able to commercialise the product in 2015.

Awareness of emerging trends was seen as the second greatest benefit of support. CfSD placed particular emphasis in workshops and communications to SMEs on raising awareness of emerging issues and new business opportunities. The concept of moving towards a more Circular Economy and the business opportunities that may develop as a result was a key theme of many of CfSDs workshops. CfSD also undertook research grassroots innovation and the emergence of hackers and fixers which was shared with SMEs as indicative of how access to information, social media and communities are starting to provide new ways for people to engage with products and services, which have the potential to offer new more sustainable models of consumption.

Introduction to potential third-party collaborators was seen as the third greatest benefit of support. CfSD has wide ranging experience and a large network of contacts amongst SMEs, the sustainability, R&D and Funding communities and was able to provide introductions and suggested connections to many FUSION SMEs.

### **Lessons Learnt Supporting Eco-innovative SMEs**

1. In agreement with the findings from SUSCIN and EcoMind projects ([Lessons learnt supporting SMEs on Eco-Innovation, 2012](#)) the value of networking with other SMEs was seen by SMEs as being the greatest benefit of FUSION support. For start-ups, in particular, the value of hearing how other small businesses have addressed challenges is of real value as are the opportunities for collaboration between SMEs who met through FUSION. Facilitating connections and providing SMEs with the space and opportunity for networking with their peers was a key element of CfSDs support and will continue to be so in any future programmes of SME support.
2. External Funding for R&D and growth was a common interest amongst SMEs. However, the majority of SMEs lacked the time and experience required to successfully apply for funding. CfSD provided considerable advice on where and how best to secure funding with some notable successes. At least twelve of CfSD's start-up and transition SMEs won [Innovation Vouchers](#) from Innovate UK to pay for third-party consultants to work on a variety of projects, to help them innovate, develop and grow. Innovation vouchers provide a relatively straight-forward and non-time consuming means for SMEs to secure £5,000 for expert support.
3. SMEs want bespoke support but share common interests. Subjects relating to funding, intellectual property, marketing and emerging trends are some examples of the areas of interest to all SMEs that can be disseminated to the group. However, individual businesses need specific market intelligence or research.
4. Many eco-innovative SMEs are very product focussed rather than customer focussed. At the extreme some SMEs who had developed new products were very competent technologists but had little experience of how to commercialise their innovative ideas, products or services. Green Innovation workshops, Greenthink©, challenged some SMEs to think differently about how to successfully engage the market.
5. Cross border working is a challenge in the absence of funding for travel. Whilst the FUSION project encouraged cross border working and collaboration between SMEs in different countries in the '2 seas region', the absence of funding for SMEs to travel cross border meant that UK based SMEs did not take up the opportunities presented. Under the EcoMind project funding had been available for SMEs to travel cross-border and many had taken up this opportunity to

develop cross-links. CfSD recognised early on in the FUSION project that the lack of SME travel funds would prove to be challenge and so in partnership with Dutch FUSION partner ENVIU, developed and organised a series of webinars to facilitate cross border connections, without the need for travel.

6. Some SMEs have rapidly changing support needs. Startups, are by definition at an early stage in the development of their business and although many have a core product, service or concept, they usually lack a clear business plan or just simply change focus based on new ideas or external pressures. This requires a highly flexible approach to 1:1 support, which CfSD was able to provide with its extensive knowledge of working with SMEs and wide network of contacts. It is important to develop a clear action plan for support from the outset, and while important to assist the SME in developing a good business model and planning it is equally important to recognise that for many start-ups the exploration of a wide range subjects with changes in focus is how a viable business plan is developed.
7. Complementary forms of communication are required to engage busy SMEs. Experience in both the SUSCIN and EcoMind projects informed CfSD's approach to communication with SMEs. A combination of face to face meetings, regular phone calls and email, workshops, email bulletins and social media, including twitter were used to communicate with SMEs. When supporting a large number of businesses it is important to communicate frequently and through multiple channels to ensure that SMEs are engaged and the support provider is aware of changing needs.
8. The economic downturn has led to more student interest in entrepreneurship at UCA. CfSD believe that increased interest from postgraduate students at UCA was a response to a perceived reduction in opportunities for employment at established companies. At the same time, students appeared to show increased awareness and desire to develop businesses with sustainability as a core feature. For this reason CfSD increased its focus on providing support to student eco-entrepreneurial postgraduate students. Support included initial 'awareness-raising' activity on business and sustainability and was followed by more 'hands-on' workshop events to facilitate the development of ideas and business proposition.
9. Open Innovation design workshops like CfSD's #GreenHack Challenge ([Case Study](#)) which bring together teams of people with diverse skill-sets and experience are of real value in addressing SME product design challenges, by providing tangible early-stage prototypes within a relatively short period of time. The #Greenhack Challenge also provided excellent opportunities for eco-entrepreneurial UCA students to network with and learn from businesses with real sustainable design challenges.
10. Continuous assessment of the benefits of business support may be more useful than assessment at the end of support provision. Around half of the SMEs supported provided detailed feedback on the outcomes and benefits of FUSION support. CfSD recognises that assessment at earlier points during support provision may have yielded more extensive data.
11. The concept of the Circular Economy is becoming more widely understood and seen by SMEs as a means of exploring new business opportunities. The emergence of grassroots Hackerspaces, Repair Cafés, Makerspaces and other 'community workshops' are seen by some SMEs as indicative of a potential revolution in local models of consumption and production that present future business opportunities.

For more information contact the authors on the emails above or call:

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