



News

Spring 2017

In this Issue

- Welcome to the Spring 2017 edition of the Centre for Industrial Sustainability Newsletter
- Industrial Sustainability - paradox or paradigm?
- Maintenance Matters
- Royal Society: "Pushing the revolving door"
- CIS presents findings from REDRESS project
- UK Industrial Strategy
- Steve Evans helps eco-industrial parks planning in Vietnam
- High-value products from industrial waste
- Science Festival 2017
- Global trends explored at CIS Peak Programme
- CIS takes part in steering meeting on cement industry sustainability
- Boat Races
- Workshop in Kokkola
- Dr Maria Holgado takes part in the 1st SPIRE Thematic Workshop on Industrial Symbiosis
- Dr Miying Yang takes part in II WeDPI workshop in Brazil

Welcome to the Spring 2017 edition of the Centre for Industrial Sustainability Newsletter

Excited. Buzzing. What's next?!? Sleep please. Where next?!?

It has been a busy time at the **Centre** – the busiest ever – which partly explains the gap since our last communique.

Most of that has been busy in a good way: winning new research contracts, new researchers, publishing

papers and reports, working on exciting projects, completing PhDs, all of which is highlighted below. At any one moment the team can be in 5 or more countries across 3 continents, studying practices or influencing them (such as our Masters projects to help build a fantastic apparel factory in Ghana).



More challenging, but equally important, has been the fantastic work of **Ian Bamford** and **Sharon Mey** in "landing" the 5 year Centre grant on time and on cost (something akin to landing a plane on an aircraft carrier in a gale) and then keeping their efforts going to ensure that everyone has contract certainty as far as possible. The fact that we have been able to keep working as a research centre, developing our ideas, building tools and working with companies, is testament to their hard work behind the scenes.

We now find ourselves in a high-demand situation – with other universities in the UK and globally wanting to collaborate (and fund that co-operation), with researchers seeking to collaborate on specific research projects, and with companies wanting to do ever more projects. We feel stretched but in a good way. We now need to prioritise our time to make sure that we achieve the most impact that we can.

And of course, in parallel to all this we have become involved in the UK government's efforts to deliver an Industrial Strategy... and our own efforts to revisit our strategy in the light of major technological

- **How sustainable is your mulled wine? Cambridge students explore its origins.**
- **New Award: Finding sustainable value with low income entrepreneurs in Brazil**
- **New Award: IUK Crowd-funded Forestry**
- **New Award: H2020 project Scaling European Resources with Industrial Symbiosis (SCALER)**
- **New Award: Subsea 7**
- **CIS in the Media**
- **New Opportunities**
- **Moving On**

Events

2Degrees and Manufacture2030. One of our members, 2degrees, are launching an exciting new online tool to help manufacturers identify, prioritise and implement energy saving opportunities in their operations, it's called M2030bee. It's got a lot of potential, and to ensure it's really flying when launched in late June, they (2degrees) are offering a limited number of free annual licences & a site tour of Jaguar Land Rover in exchange for feedback in May/June. If you're interested, or want more info, contact **Nick Donoghue** and quote 'Cambridge' in the subject line.

- Overview of the Beetool – 2pager flyer available [here](#).
- Overview of the bee100 offer & launch event invite – 1 page descriptor available [here](#).

24th Annual Research Methodology Workshop

changes in internet of things, modelling and big data analytics (watch this space for some very cool things soon!)

This year we will not have our annual opportunity to catch up with the news and with the research, and to meet each other and some new ideas, as the annual conference funding and resourcing has gone, and we are looking at ways to revive this. Please feel welcome to drop in and get your own update, and to bring your own news and ideas to us. We will miss you.

Steve

Prof Steve Evans, Director of Research, Centre for Industrial Sustainability

Industrial Sustainability - paradox or paradigm?



Two factories make identical chocolate bars using identical machines. Why does one use 500 per cent more energy than the other? This is the type of question that **Prof Steve Evans**, Director of the IfM's Centre for Industrial Sustainability (CIS), is working with manufacturers to answer in his ambition to make manufacturing more sustainable. Professor Evans explains that this chocolate factory example is not actually that extreme or uncommon and that the environment, society and manufacturers can all benefit from increasing non-labour resource efficiency, re-thinking business models and transforming industrial systems. [\[more\]](#)

Maintenance Matters

Dr Maria Holgado has been researching maintenance and particularly how it can make a vital contribution to a company's long-term sustainability – when measured economically, socially and environmentally. Maintenance used to be regarded as 'a necessary evil' by manufacturers – expensive, time-consuming and a drain on resources. It is



8-9 June 2017. This event is specifically aimed at doctoral researchers. It seeks to equip participants with an appreciation of research design, methods and how to overcome potential challenges on their programmes.

Sustainability Leadership Laboratory (Lab) on Business Model Innovation 17-18

October 2017. The Centre for Industrial Sustainability invites you to its third Sustainability Leadership Laboratory (Lab) on Business Model Innovation at Maddingley Hall in Cambridge. The Lab is a two-day immersive workshop which will help you tackle emerging opportunities for a more sustainable business. The Lab is an ongoing collaboration with the [Cambridge Institute for Sustainability Leadership](#). You can join the Lab as a standalone course or you can also use your attendance as credit towards a Postgraduate Diploma in Sustainable Business. [For more information and booking](#)

New Staff

We would like to welcome the new staff and visitors to the Centre

Catherine Tilley

now a mainstream view amongst researchers that maintenance (or asset management more broadly) is not only a 'must do' but also represents an opportunity to add value and to improve productivity and performance. [\[more\]](#)

Royal Society: "Pushing the revolving door"

"Pushing the revolving door" is a Royal Society initiative encouraging researchers to move between industry and academia. [Prof Steve Evans](#) is one of their 2017 case studies, which involved talking about what makes it easier/harder to move between the two worlds. Vitsoe kindly offered a backdrop for a video piece that explains Steve's story (see the links below for more). The videos and booklet were launched at a dinner at the Royal Society, London, in front of Prince Andrew.

- Steve's [case study](#) online
- [Other stories](#) in the collection
- The [video](#) on the Royal Society YouTube channel

CIS presents findings from REDRESS project

CIS held a public event to present the outcomes of their REDRESS project with M&S, investigating how the firm could achieve the benefits of Circular activity in its clothes businesses. REDRESS was a two-year project funded by the TSB competition 'Supply Chain Innovation Towards A Circular Economy'. The aim was to drive garment recovery and retained value through business model and supply chain innovation, seeking to accelerate M&S commitments around reducing waste. At the event, held on 9 November 2016 in London, CIS presented their findings regarding effective approaches to running disruptive innovation in large organisations, sharing insights, tools and methods used in this ground-breaking project. There were about 70 attendees with representatives from brands, suppliers, the service industry, industry organisations, government, academia, sustainability consultants and charities. The outcome of the event was very positive. The insights into the critical success factors for disruptive innovation in large organisations were of great interest to the audience and the short demonstrations of some of the tools that were particularly helpful were very popular. Many of the attendees have asked for a longer and more detailed workshop to be run so that they can gain more experience of these tools, and CIS is planning to run this in conjunction with M&S in the New Year. It is quite likely that the Centre will run similar one-day workshops in 2017 which would be open to a wider audience. To find out more please contact [Ian Bamford](#).

UK Industrial Strategy

[Prof Steve Evans](#) has been busy in various activities in responding to the first Government Green Paper on Industrial Strategy in a generation. Steve has been leading the Institution of Engineering and Technology's response, and co-ordinating the cross institution response on what is called Pillar 8 'Building World Leading Sectors' for the RAEng. He has met with Minister Nick Hurd on the link between resource productivity and the Industrial Strategy and spoken at various Westminster events on the topic. Steve is currently working with 3 different sectors in various stages of developing their sector deal to



Catherine Tilley has joined the centre as a doctoral student. She will be researching the ways in which companies change their decision making processes in response to their changing strategies for environmental and social sustainability. Prior to joining the IfM, she was Director of Education at the Institute for Sustainability Leadership, where she developed her interests in sustainability and teaching. For over 20 years, Catherine worked in management consultancy, working on a wide range of topics with a particular interest in organisation and strategy. She has an MA from Cambridge and an MBA from Manchester Business School.

Ernst-Jan Prosman



Ernst-Jan Prosman joined the centre as a visiting PhD student until the end of January 2017. He is a second-year PhD student at Aalborg University, Denmark. Ernst-Jan has a Master's degree in Supply Chain Management and a

take to Government. There is no doubt that it is an interesting time, and that the industrial strategy is a major opportunity with Government opening its doors to any sector that wishes to seek a deal. This combination of active strategy with a passive government role in deciding content is very unusual and is already placing pressure onto the sectors to develop strong responses.

Steve Evans helps eco-industrial parks planning in Vietnam

Prof Steve Evans, along with Dr. Nguyen Van Trung, Vice Minister, Ministry of Planning and Investment and Ms. Beatrice Maser, Ambassador of Switzerland to Vietnam, was invited to join the Expert Group Meeting on Eco-Industrial parks in Vietnam. The meeting, which took place in Da Nang on 29-30 September, was organised to help the United Nations Industrial Development Organisation (UNIDO) and the Vietnamese government in their planning for future eco-industrial parks. Steve explained CIS's research on what works in designing industrial parks and government policy to support parks, as part of a large initiative to move Vietnams 200+ industrial parks to a sustainable condition. Steve and former IfM researcher Dr Jae Hwan Park had previously worked with UNIDO on a project to assess the economic, environmental and social dimensions of the industrial policies of the Association of Southeast Asian Nations (ASEAN), with an aim to encourage sustainable growth in the region. Two UNIDO working papers were published in 2014: 'Sustainable assessment of chemical industries for policy advice – the case of the Philippines, Thailand, Indonesia and Viet Nam' and 'A proposed methodology for the sustainable assessment of industrial subsectors for policy advice'.

High-value products from industrial waste



The Centre has been working closely with leading Sri Lankan garment manufacturing companies to transform waste streams into high value products through innovative remanufacturing processes and new business models. Research Associate **Dr Curie Park** has been working in Sri Lanka investigating the opportunities for high value

Research Master's degree in Operations Management and Operations Research from the University of Groningen, The Netherlands. The focus of his PhD research is on optimizing supply chains and operations for circular supply chains, both economically and environmentally. He conducts his research at a cement plant in Aalborg, Denmark, where he is involved in projects around optimizing the alternative fuel supply chain, assessing the impact of alternative fuels on cement production and researching the challenges of new industrial symbiosis projects such as district heating and cooling.

Aline Sacchi Homrich



Aline Sacchi Homrich is a PhD student visitor under the supervision of Prof. Steve Evans until the end of August 2017. Her supervisor in Brazil is Prof Marly Monteiro de Carvalho in the Industrial Engineering Department at the Polytechnic School from the University of São Paulo (USP). Aline is working on how business models in Product-Service Systems (PSS) influence "sustainability-related outcomes" specifically during the middle of their lifecycle or usage by the consumer. She studied Mechanical Engineering and has a master's degree in Lean Project/Service

innovation in post-production textile waste as part of the international collaboration project, TransTextile. [\[more\]](#)

Science Festival 2017

The IfM was open to the public on Saturday 25th March for the annual Cambridge Science Festival. Approximately 1000 people come through the doors each year, including many children, so it's a great opportunity for the IfM to showcase its research and to inspire the next generation of budding engineers. The researchers at the Centre for Industrial Sustainability spent a busy but rewarding afternoon playing games with the children (and some of the adults). The Chocolate Bunny



Factory Game, a board game developed by **Dee Dee Frawley** teaching eco-efficiency in a factory, is always popular with the prize of a gold-wrapped chocolate bunny at the end. A PowerPoint presentation, also by Dee Dee, takes the participant through the process of making things in a way that does not waste resources or damage the environment, and ends with the Life of a Plastic Bottle challenge: how to recycle a plastic bottle to prevent it ending up in landfill. The **One Thousand kWh card game** (available to purchase), developed by former IfM researcher Dr Mélanie Despeisse and teaching energy efficiency in the home, is a fun game for the whole family to play. The aim is to save 1,000 kWh and the first player to reach this energy saving target wins. There is also a factory version available, used successfully in industry to help companies raise awareness about energy efficiency with their employees.

Global trends explored at CIS Peak Programme



Management from the Mechanical Engineering Department of the Federal University of Santa Catarina. She has almost ten years of experience in energy projects, mainly Hydropower plants, first as mechanical engineer and after as project manager. Nowadays, she collaborates as a researcher in the nucleus of Quality and Product Engineering (QEP) and in the Laboratory of Project Management (LGP) from USP. Her main research interests are Business Models in Product Service Systems, Industrial Sustainability, Operations /Projects Management, Servitisation, Circular Economy and System Dynamics for Sustainability.

Congratulations

Na Jiao, who is supervised by Dr Steve Evans, has been granted "The 2016 Chinese Government Award for Outstanding Self-finance Students Abroad" by the China Scholarship Council. This award, starting in 2003, was founded by the Chinese government with the purpose of rewarding the academic excellence of self-financed Chinese students studying overseas. Only those with outstanding performance in their PhD studies are considered by the award selection panel and no more than 500 young talents are granted the award each year all over the world.

Zahit Ergun Gungor passed his PhD viva in October 2016. His thesis is titled 'Eco-effective Changeovers: Integrating economic and

Researchers were challenged to apply insights in new forms of value to their own research activities and projects at the recent CIS Cohort Peak Programme held at Losehill Hall in the Peak District from 16-20 January. This programme is the largest gathering of the **Sustainability Cohort** during the year, where senior researchers, postdocs, students and practitioners come together to look at the challenges emerging in sustainable manufacturing and explore their role in navigating them. The event was themed around the impact that global trends may have in manufacturing and sustainability practice and research, with a specific focus on Industry 4.0 and its implications. Industrial collaborators Airbus and IES shared their challenges in industrial sustainability and engaged in dialogue with the researchers. For more information contact **Dr Maria Holgado Granados**.

CIS takes part in steering meeting on cement industry sustainability



IfM members met with representatives from the Department of Business Energy Innovation & Skills (BEIS), Hanson UK and Lafarge Holcim to discuss opportunities to reduce the environmental impact of the cement industry. **Daniel Summerbell** presented outcomes of current research, with various opportunities to reduce CO2 emissions from plants, while **Dr Mukesh Kumar**

(CIM) presented some successful examples of industrial-academic collaboration to serve as possible models for an ongoing project. The steering discussion concluded that combustion optimisation should remain the focus of research, and several possible ways of funding the project were discussed. For more information contact **Daniel**.

Boat Races

Kirsten Van Fossen (CIS Doctoral Student) competed in the Cambridge University Women's Reserve Boat Blondie, which moved 13 boat lengths away from their Oxford competition over the 6.8 km Tideway course. Just minutes before the Blondie victory, the Cambridge women's Blue Boat won their race in a similar fashion—they crossed the finish line 11 boat lengths ahead of their Oxford counterparts. It was clearly a strong year for the Cambridge women. Both of the boats beat the course record of 19:45 that was set by Oxford in 2015. This year, the Cambridge Blue Boat completed the course in 18:34, and Blondie in 19:06. After such a fantastic year for Cambridge Women's rowing, Kirsten is happy to retire her oar and trade it in for some cycling cleats and running shoes. Since she started rowing at age 16, Kirsten has competed with the US Junior National Team at the 2008 World Championships, rowed with the Harvard University women during the four years of her undergraduate education, and received the **2015 Parmigiani Spirit Award**, which recognized both her rowing and academic achievements.



Workshop in Kokkola

environmental goals into a manufacturing capability'. Ergun will be starting as a Research Associate at Duzce University in Turkey.

Yuan Tao passed her PhD viva in February 2017. The title of her PhD thesis is 'How policies work to foster Industrial Symbiosis: a comparison between UK and China'. This study aims to enhance the understanding of the role of the nature of policy-making in Industrial Symbiosis (IS) development in UK and China. It seeks to answer the primary research question 'What policy worked well under what conditions, and what did not work well under what conditions in fostering IS practice in UK and China?'

Ioannis Mastoris passed his PhD viva. His thesis is on Sustainable life-cycle management. Sustainability is often considered as an add-on dimension of decision-making in organisations. This project is increasing our understanding of how sustainability aspects can be integrated into decision making across the organisation. This helps manufacturers to identify opportunities for improving and ease the processes of integration of sustainability aspects in decision making.

Miriam Benedetti, who works as a postdoc in the centre, passed her PhD viva in March 2017. The title of her PhD thesis is "Energy Performance Management in manufacturing: methodology, tools and framework for targets' setting and consumption control". This study aims to define a methodology to help companies setting



The Centre for Industrial Sustainability organised a workshop with the University of Helsinki in the Kokkola region, Finland in March 2017. The workshop was organized as a part of the Closing the Loop for High Value Added Materials (CloseLoop) research project led by **Dr Minna Lammi**. Its purpose was to collect data about the development and experiences of Circular Economy in different localities. The method used for the workshop was the Value Exploring Tool from the **Cambridge Value Tools** package. The workshop experience also enabled Cambridge University to develop the tool to be used in multi-stakeholder processes. Commercial Director **Ian Bamford** and **Prof Steve Evans** facilitated the workshop. The workshop considered what added value and opportunities a circular economy approach could create for local communities and businesses in the Kokkola Region, and how collaborating could increase opportunities and create a more resilient region. Steve also made a keynote speech, "Challenges in closing the circle", in the CloseLoop project stakeholder meeting in Helsinki, Finland.

Dr Maria Holgado takes part in the 1st SPIRE Thematic Workshop on Industrial Symbiosis

MAESTRI project coordinator **Dr Maria Holgado** attended the 1st SPIRE workshop on 30 March 2017 that brought together results from SPIRE projects funded by the European Commission. Maria was invited to present the results from the **MAESTRI** project, introducing the industrial symbiosis methodology from MAESTRI to an audience of about 80 participants, mainly represented by **A.SPIRE members** and other **SPIRE projects** working on industrial symbiosis. Within the same session, EPOS and SHAREBOX projects presented their own methodologies and the session ended up with a panel discussion with open questions from to the audience. Please contact **Maria** for more information on MAESTRI project activities.

Dr Miying Yang takes part in II WeDPI workshop in Brazil

Dr Miying Yang, a former CIS researcher, was invited as a guest speaker at the Product Development and Innovation Workshop (II WeDPI) organised by University of São Paulo (USP) in Brazil, on 27-28 October. This industrial-academic workshop brought together

targets and controlling energy performances of their assets over time, thus allowing them to understand their energy behaviour and to identify improvement opportunities. The PhD was awarded by the University of Rome "Tor Vergata".

Publications

Evans, S., Adams, R., Lettice, F., Smart, P., & Hemel, S. Pre-paradigmatic Status of Industrial Sustainability: A Systematic Review. *International Journal of Operations and Production Management*.

Evans, S., Vladimirova, D., Holgado, M., Van Fossen, K., Yang, M., Silva, E., & Barlow, C. (2017). *Business Model Innovation for Sustainability: Towards a Unified Perspective for Creation of Sustainable Business Models*. *Business Strategy and the Environment*.

Evans, S., Fernando, L., Yang, M. (2017) *Sustainable Value Creation—From Concept Towards Implementation, Sustainable Manufacturing: Challenges, Solutions and Implementation Perspectives*, Springer International Publishing, pp. 203-220, ISBN: 978-3-319-48513-3

Geissdoerfer, M., Savaget, P. and Evans, S. 2017. 'The Cambridge Business Model Innovation Process', *Procedia Manufacturing*, 8, pp. 262–269.

Geissdoerfer M., Bocken N.M.P., Hultink H.J. 2016. Design thinking to enhance the sustainable business modelling process. *Journal of*

experts from universities and servitizing companies in Brazil. Miying gave a presentation on product-service systems in China, including motivation, challenges and case studies. She also ran a workshop, using the Sustainable Value Analysis Tool developed from her PhD, with 59 representatives of 18 companies from various sectors. This workshop enhanced the collaboration between CIS and USP.

How sustainable is your mulled wine? Cambridge students explore its origins.

In an event organised by PhD student [Kirsten Van Fossen](#) as part of the Global Food Security initiative, researchers across the University who are interested in global food systems came together to celebrate the holidays over a glass of mulled wine - not just any glass of mulled wine, but one that they were critical in making as each guest brought an ingredient. At the start of the evening, guests introduced themselves, their research interests and shared information on the ingredient they contributed, such as where it was purchased, where it originated from and whether it could be grown in the UK. The evening included a stimulating talk and discussion led by guest speaker, Emilie Aguirre, who is an Academic Fellow at the Resnick Program for Food Law and Policy at UCLA School of Law. Emilie spoke about the local impacts of our increasingly globalised food system, drawing on her research into how macro-level laws, policies, and governance structures impact diet, health, and social inequalities. Both the talk and mulled wine-making achieved the purpose of the evening - to start a conversation about the interplay of global and local in our current food systems. The [Cambridge Global Food Security](#) initiative is a virtual network of researchers across the University, from crop scientists and engineers to specialists in policy, economics and public health. It promotes interaction and knowledge sharing, and supports collaborative research to address the issues surrounding food security at local, national and international scales. For more information contact [Kirsten](#).

New Award: Finding sustainable value with low income entrepreneurs in Brazil



[Prof Steve Evans](#), and doctoral student [Paulo Savaget Nascimento](#) have teamed up with a Brazilian non-governmental organisation (NGO)

Cleaner Production, 135, pp. 1218-1232

Geissdoerfer, M., Savaget, P., Evans, S., 2016. 'The Cambridge Sustainable Business Model Innovation Process,' 14th Global Conference on Sustainable Manufacturing, GCSM 2016, Cape Town, South Africa, 3-5 October 2016.

Geissdoerfer, M., Savaget, P., Bocken, N.M.P., Hultink, E.J. 2017. The Circular Economy – A New Sustainability Paradigm? Journal of Cleaner Production, 143, pp. 757–768.

Khripko, D., Morioka, S., Evans, S., Hesselbach, J., Monteiro de Carvalho, M., 2016. 'Demand Side Management within Industry: a Case Study for Sustainable Business Models', 14th Global Conference on Sustainable Manufacturing, GCSM 2016, Cape Town, South Africa, 3-5 October 2016.

Litos, L., Borzillo, F., Patsavellas, J., Cockhead, D., Salonitis, K., 2017. Management Tool Design for Eco-efficiency Improvements in Manufacturing – A Case Study. Procedia CIRP, Complex Systems Engineering and Development Proceedings of the 27th CIRP Design Conference Cranfield University, UK 10th-12th May 2017.

Litos L., Yi. Y, Salonitis K., Tsoutsanis P., Patsavelas J. 2017. Improving the curing cycle time through the numerical modeling of air flow in industrial continuous convection ovens. The 50th CIRP Conference on Manufacturing Systems (CMS), in Taichung, Taiwan 3rd-5th May 2017

to win a prestigious grant to help low-income entrepreneurs living in the slums of Belo Horizonte. [[more](#)]

New Award: IUK Crowd-funded Forestry

The forestry industry is a vital part of the Scottish rural economy, contributing almost £1 billion / year and supporting 25,000 FTE jobs. The Scottish Government plans to be creating 15,000 hectares of forest per year by 2024-25. This is an ambitious target, but as the UK is the 3rd largest importer of forestry products after China and Japan, with an import value of nearly £10 billion/ year, this target is vital to strengthening local economies and mitigating climate change. This project aims to design a novel business model that enables small investors to invest in and benefit from forestry, something currently only available to sophisticated or wealthy investors. The project would seek to understand all of the benefits of forestry that these investors would value, especially those that may be difficult to account for in a pure economic model. The project will explore different possible business models that would enable these investors to fully realise the benefits of forestry. Designing a company around these benefits will allow for a more innovative, integrated and robust approach to forestry than currently achieved by institutional investment. The project is led by a start-up company which looks to utilise early stage design processes for the first time supported by the expertise of The Centre for Industrial Sustainability. For more information contact [Dr Curie Park](#).

New Award: H2020 project Scaling European Resources with Industrial Symbiosis (SCALER)



CIS has been awarded a new European Commission funded project within the SPIRE calls of the Horizon 2020 programme. SCALER project is a 30-month Coordination and Support Action bringing together 5 organisations and a large network of supporting entities. SCALER aims to massively increase the

implementation of industrial symbiosis, by developing mechanisms to retain the embedded value of European resources. It brings together qualitative and quantitative tools and methods to support self-organised initiatives on industrial symbiosis and to enhance facilitation processes and coordination actions. The creation of new spaces for interaction, collaboration and cooperation and the engagement of a broader set of stakeholders are crucial elements of the multiplier effect in industrial symbiosis implementation. CIS is the technical coordinator of SCALER project and will also be leading the activities to create pathways to foster resources synergies. For more information about the SCALER project contact [Dr Maria Holgado](#).

New Award: Subsea 7

Litos L., Gray D., Johnston B., Morgan D., Evans, S., 2016. 'A maturity-based improvement method for eco-efficiency in manufacturing systems', 14th Global Conference on Sustainable Manufacturing, GCSM 2016, Cape Town, South Africa, 3-5 October 2016.

Liu, P., & Barlow, C. Y. (2017). Wind turbine blade waste in 2050. Waste Management.

Savaget, P., Acero, L., 2017. 'Plurality in Understandings of Innovation, Sociotechnical Progress and Sustainable Development: An Analysis of OECD Expert Narratives,' Journal: Public understanding of Science.

Summerbell, D., Khripko, D., Barlow, C., Hesselbach, J. (2017). Cost and carbon reductions from industrial demand-side management: Study of potential savings at a cement plant. Applied Energy, Volume 197, 1 July 2017, pg. 100-113.

Vladimirova, D. (2016). Waste to wealth: the circular economy advantage. Production Planning & Control, 1-1.

Subsea 7 is one of the world's leading global contractors in seabed-to-surface engineering, construction and services to the offshore industry. Headquartered in London, its fleet consists of over 40 vessels with pipe lay, construction, remote intervention and diving support capabilities. Subsea 7 operates worldwide in all of the major offshore fields including the North Sea, Newfoundland and Nova Scotia, the Gulf of Mexico, the Campos and Santos Basins off the coast of Brazil, offshore West Africa, Southeast Asia, and the Persian Gulf. In partnership with IfM ECS, the Centre for Industrial Sustainability will be researching the capture of sustainable value for Subsea 7 and its customers and stakeholders. For more information contact [Dr Doroteya Vladimirova](#).

CIS in the Media

[Prof Steve Evans](#) is part of a video-selfie campaign calling on supermarkets to introduce a plastic free aisle in their shops. iNews

A video-selfie campaign launches today calling on supermarkets to introduce a plastic free aisle in their shops. The campaign group A Plastic Planet is asking the public to film themselves on their phones and post the footage on its website. Their 15 seconds of fame needs to include an admission that they are a plastic addict but are ready for change and a demand that retailers introduce a plastic-free aisle in their outlets. This would stock food packaged only in biodegradable materials. The campaign hopes to gather 1 million videos to take to the chief executives of big supermarket chains such as Tesco, Sainsbury's and Asda. "This campaign is about giving us choice; the choice to buy food without plastic. We can buy gluten-free, fat-free, dairy-free. But we can't buy plastic-free. We want to work together with supermarkets to give their customers that choice," said Sian Sutherland, co-founder of A Plastic Addict. The campaign is backed by the actor Dominic Cooper, who appeared in films The History Boys and Starter for Ten. The academics Professor Bob Marsh from the National Oceanograph Centre, Professor Steve Evans, from Cambridge University and Professor Frank Kelly, Professor of Environmental Health, at King's College, London, have also thrown their weight behind the project. [Read more](#)

New Opportunities

[Yan Li](#) is currently at the University of California, Berkeley as a visiting scholar. Yan has been invited to visit Professor David Teece's research group in Haas School of Business, University of California, Berkeley for three months. Her research involves the capabilities of business model innovation and eco-efficiency. She has interests in the dynamic capability theory especially at the operational level. Enter your description



Moving On

Miying Yang has started a new position as Lecturer in Engineering Management at the College of Engineering, Mathematics and Physical

Science at the University of Exeter. She will continue her research in the areas of product-service systems, sustainable value creation, and business model innovation for sustainability, and will explore new research interests in circular economy, digital manufacturing, and sustainable supply chains. She will also be involved in various projects at CIS on developing practical tools.

Sudhir Rama Murthy joins Saïd Business School at the University of Oxford as a Postdoctoral Researcher. As a Manmohan Singh Scholar of St John's College, his doctoral research at IfM explored the Principles, Patterns and Practices of Sustainable Manufacturing. As part of the 'Mutuality in Business' team at Oxford, he will pursue his research interests in sustainable industrialisation and food supply chains.

Centre for Industrial Sustainability
University of Cambridge
www.ifm.eng.cam.ac.uk/research/industrial-sustainability/