# SCIENCE INNOVATION PARK

# SCIENCE+ INNOVATION Park

# NATIONAL Collections Centre











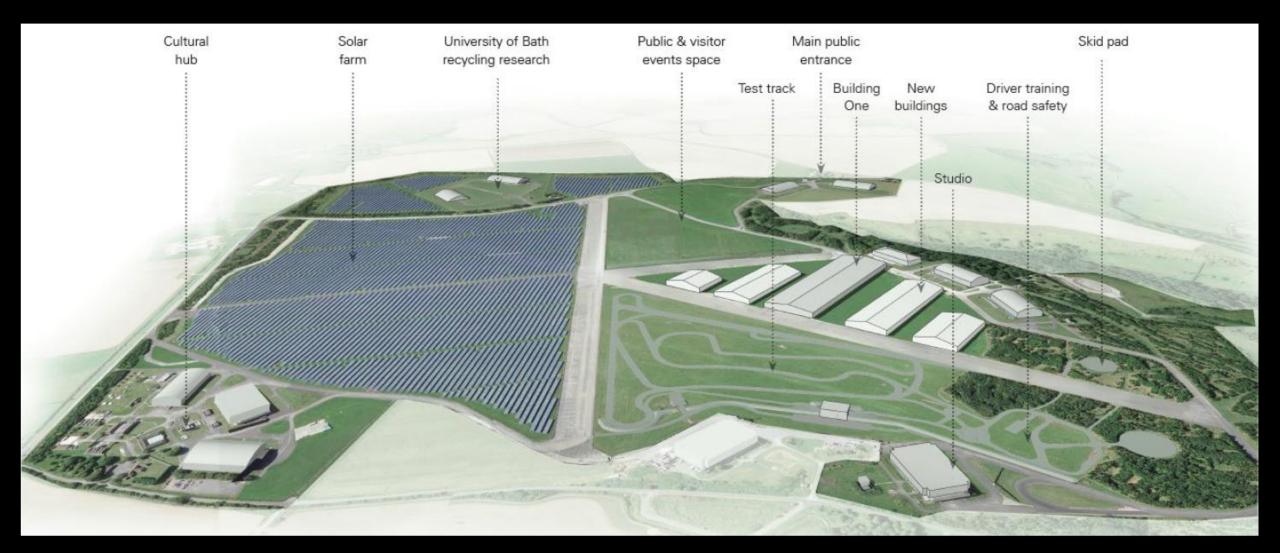














# Innovation Centre for Applied Sustainable Technologies

SWLEP Board 22nd July 2021





Innovation Centre for Applied Sustainable Technologies The University of Bath's Centre for Sustainable and Circular Technologies (CSCT) has launched a major new £17M innovation hub bringing together core partners in academia and industry to accelerate the translation of fundamental sustainable chemical technologies research

At iCAST, industry will engage with and benefit from the full range of research, development and innovation expertise provided across universities, catapults, innovation experts, LEPs and investors

The iCAST project began on 1<sup>st</sup> April 2021. This information session launches our call for engagement from members and we aim to be fully operational by September 2021













Innovation Centre for Applied Sustainable Technologies

# iCAST Partnership



#### iCAST's 45 Founding Members include:







Innovation Centre for Applied Sustainable Technologies

# The iCAST Facility

#### Mechanisms

## 6 Postdocs CORE PROGRAMMES CREATIVE HUB JOINT INDUSTRY PROJECTS 16 Technology Translators



Renewable and Bio-based Feedstocks



Sustainable Engineering Materials



**Portfolio** 

Sustainable Manufacturing



Circular Plastics

### Creative Hub @ the Carriage Works

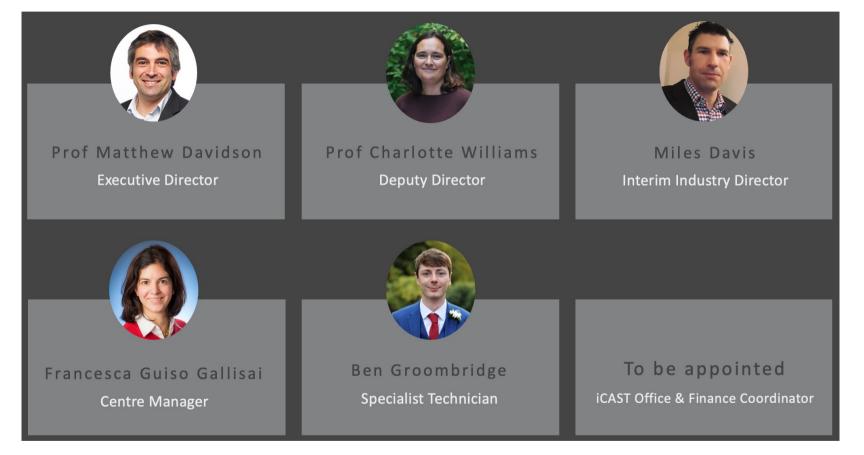




Innovation Centre for Applied Sustainable Technologies



# iCAST Team







Innovation Centre for Applied Sustainable Technologies

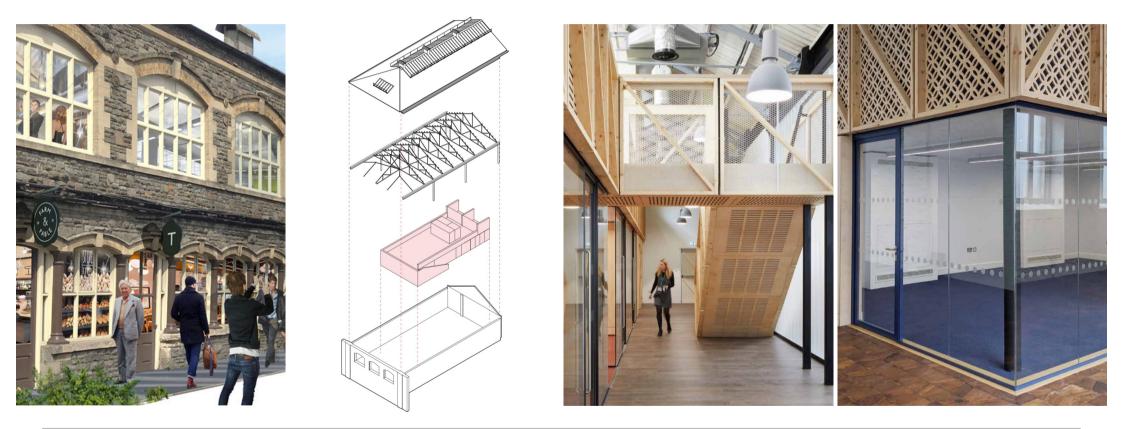
# Joint Industry Projects (JIPs)

- Industry-led, focused projects with clear targets
- Products or processes towards commercialisation either all the way to commercialisation or provide proof of principle, proof of concept or feasibility studies
- Delivered by Technology Translators funded by the RE grant. TTs will be allocated to the project with their time paid for from university funds to deliver the work
- TT's expected to manage the project delivery
- JIPs are expected to last 3-12 months
- Require industry co-funding (33%; cash or in-kind)
- Simple application process and monthly review panels to allocate resources to projects
- First projects expected to begin in September
- Standard progress monitoring and reporting (monthly / quarterly)
- IP arrangements similar to those of Innovate UK projects





# The Carriage Works







Innovation Centre for Applied Sustainable Technologies

# Key Dates

- 12th March 2021 grant offer made
- 1st April 2021 grant started
- Mid June 2021 interim base established in the Workshed at the Carriage Works
- 1st July 2021 information webinar for industry
- 24th September 2021 launch event in Swindon
- September 2021 core projects and JIPs begin
- April-September 2022 iCAST Creative Hub unit opens at Carriage Works
- September 2024 project ends and iCAST sustainable!





# icce

Innovation campus for the circular economy

Presented by: ADRIAN GRIFFITHS

22 JULY 2021

# **ICCE UPDATE**

SWLEP July Board Meeting

#### **INTRODUCTION**

# The circular economy has the power to shrink global GHG emissions by 39% and cut virgin resource use by 28%.

Material production and use accounts for the majority (70%) of GHGs emitted [1].

ICCE brings together world-class academic institutions and cutting edge technology companies to create and commercialise circular economy solutions.

This collaboration between academia and industry will allow promising lab-scale ideas to be nurtured into commercial success, accelerating the transition to zero-carbon materials.

An iconic campus, its aim is to attract the best engineers and scientists to create zero-carbon solutions for material creation and recycling.

The ambition is to run an extensive visitor program to inspire the next generation with the potential of clean technology.



icce

**PARTNERS** 









Innovation Campus for the Circular Economy

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#### THE CAMPUS



#### THE CAMPUS

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#### THE CAMPUS

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#### **RESEARCH THEMES IN CONSIDERATION**

#### Sectors

Plastics and polymeric materials	Construction materials
Electronics	Biomaterials
Metals	Automotive, inc. batteries
Fabrics and textiles	Energy
Composites	



- Materials chemistry and chemical engineering for the circular economy (including thermal and catalytic processes)
- Molecular disassembly and reformation
- Renewable and bio-based feedstocks, including CO2 (for commodity and high value chemicals)
- Super-efficient heat and mass transfer for circular economy processes
- Material flow monitoring, tracking and control for the circular economy
- Data gathering and analysis for the circular economy
- Process scaling for the circular economy •
- Process control for distributed operation •
- Life cycle analysis
- Degradability ٠
- Product design for the circular economy
- Sustainable use of engineering materials in the economy, including composites
- Sustainable manufacturing
- Socioeconomics of the molecular circular economy •

#### **STRUCTURE & GOVERNANCE**

ICCE will be managed by a not-for-profit organisation, ICCE Management Ltd. (IML)

IML will employ a small number of staff to undertake facilities management, manage the wet laboratory and continually seek new members to enrich the campus.

IML will be governed by a NED-led Board which will set the technical goals of the campus.



#### **STRUCTURE & GOVERNANCE**

icce



Nina El Imad, FCA Chair of Havfram AS



**Sir John Grant** Past UK Permanent Representative to the EU Chair



Prof. Matthew Davidson Bath University



Gavin Maxwell Hart, FCIOB Past president of the Institute of Building



Stephanie Loo Environmental Scientist, Secretary



**Prof. Jonathan Seville** Birmingham University, Past president of the IChemE



Adrian Griffiths CEO, Recycling Technologies Ltd.

# icce

www.icce.org.uk