

WORKSHOP

THE HOLISTIC APPROACH TO THE RECOVERY OF MATERIALS

SUMMARY

These are two, 4 hour workshops addressing barriers and opportunities to applying circular economy principles to end of life architectural glazing products. We have identified unfilled potential to recover end-of-life glazing for reuse in material production by applying disassembly techniques to collect materials ready for reuse or recycling, we will share Arup's recent approach on real projects. Aim: to explore two key technical barriers.

Workshop 1: Insulating glass units and Workshop 2: Laminated glass

In each workshop we will identify the constituent range of materials that make up the product, demonstrating the potential for separation and defining second uses for materials collected. The workshops will focus on these non-glass materials but successfully adopting this approach will in turn increase the yield of glass cullet available for closed loop recycling.

Each workshop will consist of short presentations, including expert presentations from the supply chain, case studies and disassembly demonstrations with attendee input and group exercises.

The outcome will provide attendees with practical next steps, form new collaboration opportunities and provide a clear message to industry that material recovery is viable. Output from the workshop will be disseminated, with continuing opportunities to contribute, throughout the GPD conference.

COURSE TIMETABLE 14TH OF JUNE 2023

9:00 : Start
17:00 : End

DURATION : 8 Hours

PRESENTER

GRAEME DEBRINCAT, ARUP

ABOUT THE AUTHOR(S)



GRAHAM DODD

Graham Dodd has attended GPD since 1997 and is a Chartered Mechanical Engineer with over thirty years' experience in the design of glass. His experience includes manufacturing, glass processing, contracting and façade engineering, he leads the Materials team at Arup and provides design advice on a wide range of materials and production processes. As a distinguished Arup Fellow, Graham is passionate about materials to reduce the impact they have on the environment.



GRAEME DEBRINCAT (PRESENTER)

Graeme DeBrincat is passionate about creating sustainable buildings, using circular economy principles for repair and adaption of existing buildings. As an Arup leader, Graeme works with a range of buildings with glazing coming to the end of its life. Its replacement becomes a key strategy for the upgrading of building fabric performance. Graeme is co-author of Rethinking the lifecycle of architectural glass, which has become an industry beacon for increasing the recovery of glass from buildings.



FRANCIS ELLINGTON

Francis Ellington has worked in the glass industry since 1993 in various capacities; as founder and director of Fusion Glass Designs, a specialist manufacture developing decorative effects for interior and exterior applications, establishing manufacturing plants and agents' networks internationally. In 2010 Francis established FACE Architectural, developing a network of specialist glass manufacturers and as independent consultant performing research, feasibility reports, manufacturer assessments and sampling stages for specialist glass projects.



FLORENCE WU

Florence Wu is a Materials Engineer at Arup and is passionate about solving complex material choices by optimising performance and cost through research, design and engineering low carbon solutions. She has been exposed to a wide range of materials through research and feasibility studies, sustainability calculations and failure diagnostic inspections. She works closely with facades, ventures and sustainability teams to develop innovative solutions.