



DRIVE



Accelerating Deep Energy Retrofit in Housing through Modular and Circular Solutions

WHEN: 11TH MAY 2023 (9.30-17.00h)

WHERE: [RADISSON BLU HOTEL, ATHLONE, CN37 A8X9](#)



Before and After: Circular renovation pilot in Athlone

[Technological University Dublin](#) and the Irish Drive 0 project partners, in association with [Housing Europe](#), invite you to the conference 'Accelerating Deep Energy Retrofit in Housing through Modular and Circular Solutions' on the 11th May at the Radisson Blu Hotel, Athlone.

This conference provides an opportunity to examine modular circular renovation and construction solutions in the Irish housing sector and share experiences and lessons learnt from completed Irish and EU pilot projects, which should be of interest to everyone involved in sustainable housing and buildings, notably professionals in building design, construction, manufacture and those involved in housing stock management and policy.

[Drive 0](#) is an EU research and innovation project, funded under Horizon2020, which seeks to demonstrate the application of circular solutions in the deep energy retrofit of housing (and buildings) across Europe via several pilots, one of them located in Athlone, Ireland. The project partners were TUDublin (Research), Coady Architects and Vision Built (Industry), in association with SISK and building owners Westmeath County Council.

The [Irish pilot](#) comprised the deep energy retrofit of two 1970's masonry constructed three-bedroom semi-detached houses demonstrating use of modularised construction panels in the fabric upgrade and extension of the dwellings, achieving a 65% reduction in energy use.

The morning session will cover the Irish deep energy retrofit case study with a focus on the design, development, testing, and realisation of the circular modular construction solution and the performance impacts of the Irish Drive retrofit.

The afternoon session will widen out to focus on applications and lessons learnt, from the Irish and other social housing practices in Europe, on how to achieve circularity in renovation through industrialised methods, procurement, planning, regulation, management and financial instruments. An interactive workshop will be led by Housing Europe on how to design your own circular renovation concept for social housing.

Site visits to the demonstration project in Athlone town will be arranged with coach transport provided from hotel conference venue and back (in two groups) during an extended lunch period, with light lunch provided.

Places are limited, so please [register](#) as early as possible.

Travel: Athlone can be reached by motorway, bus and rail networks.



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MORNING SESSION

CIRCULAR MODULAR SOLUTIONS: A DETAILED FOCUS ON THE RESEARCH, DEVELOPMENT AND REALISATION OF THE IRISH CASE STUDY.

REGISTRATION 9:00-9:30AM

MODERATOR: JOSEPH LITTLE, TU DUBLIN

09:30-09:45	WELCOME AND OPENING ADDRESS	DR CIARAN BYRNE SUSTAINABLE ENERGY AUTHORITY OF IRELAND
09:45-10:00	DRIVE 0 AND IRISH CASE STUDY OVERVIEW Setting the context - an introduction to the Drive 0 project and overview of Irish demonstration case - circularity, modularity and deep energy retrofit	PATRICK DALY TU DUBLIN
10:00-10:15	DESIGN AND DEVELOPMENT OF THE MODULARISED SOLUTIONS Summary of the design and development of the modularised solutions and lessons learned - the architects' perspective	CORMAC FLOOD COADY ARCHITECTS
10:15 - 10:30	MANUFACTURE, TESTING AND INSTALLATION OF THE MODULARISED SOLUTIONS Summary of design, development, testing, manufacture and installation of the modularised solution and lessons learnt - manufacturers perspective	GAVIN WALLER VISION BUILT
10:30-10:45	IMPLEMENTING AND ASSESSING CIRCULARITY An overview and critique of implementing and assessing circularity of the modularised façade upgrade solution and lessons for industry	PATRICK DALY TU DUBLIN
10:45 - 11:00	ENERGY AND ENVIRONMENT BENEFITS An overview of key improvements and benefits from the retrofit - energy, thermal comfort, air quality	PHILIPPE LEMARCHAND TU DUBLIN
11:00 - 11:15	TEA & COFFEE BREAK	
11:15-11:30	POST OCCUPANCY EVALUATION An overview of the key improvements and benefits from the retrofit - from user interviews and study.	PAULA GALLEGO TU DUBLIN
11:30 -11:45	CIRCULAR MODULAR SOLUTIONS IN MAINSTREAM RETROFIT - THE ESTONIAN STORY The integration of circular modular solutions, developed in Estonian demonstrators, into national mainstream deep energy retrofit programme	KALLE KUUSK TALTECH
11:45-12:00	IMPLEMENTING AND ACHIEVING CIRCULARITY IN IRISH CONSTRUCTION Lessons learnt from the Irish / EU Drive 0 project - challenges and opportunities for application in the Irish construction industry	PATRICK DALY TU DUBLIN
12:00 - 12:30	OPEN FORUM DISCUSSION	CHAIR



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	An open forum discussion on circularity, modularity, retrofit and energy efficiency in buildings with panel.	JOSEPH LITTLE TU DUBLIN
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DEMONSTRATOR SITE VISIT / LUNCH

LOCATION	ATHLONE TOWN (COACH WILL BE PROVIDED)
TIME	12.30 - 2.00 PM (TWO GROUPS 30 MINS EACH)
	<p>ORGANISER - PATRICK DALY (TU DUBLIN)</p> <p>GROUP A DEPART: 12.30 - ARRIVE: 12.45 - SITE: 30 MINS - DEPT: 1.15 - HOTEL: 1.30</p> <p>GROUP B DEPART: 1.00 - ARRIVE: 1.15 - SITE 30 MINS - DEPT: 1.45 - HOTEL: 2.00</p> <p><i>*NB* THE TWO GROUPS DEPART TIMES AND LUNCHES NEED TO BE CLEARLY COMMUNICATED AND MANAGED</i></p>

AFTERNOON SESSION

INDUSTRIALISED RENOVATION: A TRAINING FOR SOCIAL AND COOPERATIVE HOUSING PROVIDERS ON HOW TO BE MORE CIRCULAR.

MODERATOR: CLARA MAFÉ, HOUSING EUROPE

2:00	OPENING ADDRESS	MR. OSSIAN SMYTH MINISTER OF STATE
2:05-2:15	ONLINE QUIZ: testing notions of circularity amongst the audience	CLARA MAFE HOUSING EUROPE
2:15-2:30	<p>THE ABC OF CIRCULARITY</p> <p>An introduction to how circularity is applied in the construction and renovation through industrialisation</p>	PATRICK DALY TU DUBLIN
2:30-2:45	<p>RENOVATION CONTEXT IN THE APPROVED HOUSING BODIES (AHB) SECTOR</p> <p>Policy context (procurement, financing schemes (different from local authorities), business case)</p>	DONAL MACMANUS IRISH COUNCIL FOR SOCIAL HOUSING
2:45-2:55	<p>MOBILISING EU FUNDS FOR RENOVATION OF SOCIAL HOUSING</p> <p>Sources of funding available from the EU to help meet new construction and renovation obligations.</p>	DARA TURNBULL HOUSING EUROPE
2:55-3:10	<p>MANAGING CIRCULAR RETROFITS, THE EXPERIENCE OF WESTMEATH COUNTY COUNCIL</p> <p>Lessons learnt from the Irish Drive 0 pilot, comparing deep circular to conventional and application in new build - stock manager perspective</p>	THERESE O'HALLORAN WESTMEATH COUNTY COUNCIL
3:10-3:30 TEA & COFFEE BREAK		
3:30-3:45	<p>PROMOTING CIRCULARITY / SUSTAINABILITY IN HOUSING - GREEN PUBLIC PROCUREMENT</p> <p>Embedding circularity in housing projects over the whole life cycle of buildings.</p>	PAT BARRY IRISH GREEN BUILDING COUNCIL
3:45-4:00	CIRCULAR AND COST-NEUTRAL SOCIAL HOUSING RENOVATION IN THE NETHERLANDS	ROBIN VAN LEIJEN AEDES



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4:00-4:15	<p>NORTHERN IRELAND EXPERIENCE</p> <p>Modular retrofitting/circular economy in the public housing sector in Northern Ireland</p>	<p>ADRIAN BLYTHE</p> <p>NORTHERN IRELAND HOUSING EXECUTIVE</p>
4:15-5:00	<p>INTERACTIVE SESSION DIY: DESIGN YOUR OWN CIRCULAR RENOVATION CONCEPT FOR SOCIAL HOUSING.</p>	<p>MODERATED BY HOUSING EUROPE AND TU DUBLIN</p>