

WHY PROCUREMENT MATTERS

Procurement is the process by which a client plans, specifies, tenders, evaluates and awards contracts for works, goods or services. In the public sector, procurement is governed by EU procurement directives and Irish regulations, and must follow principles of fairness, transparency, equal treatment and non-discrimination, with different procedures applying above defined financial thresholds.

In Ireland's public works sector, procurement and delivery of capital projects is structured by the Capital Works Management Framework (CWMF). The CWMF standardises project planning, tendering and contract management through guidance notes, templates and the Public Works Contracts (PW-CF) suite.

Procurement has an important role for the application of Circular Economy (CE) principles into construction and engineering projects. Circular outcomes arise from a series of practical decisions made across the project lifecycle. These include: (i) early design and specification decisions, such as designing for adaptability and disassembly and explicitly specifying reused or recyclable products; (ii) the inclusion of clear and measurable requirements within procurement specifications, for example reuse or recovery targets and associated reporting requirements; (iii) the application of evaluation criteria under the Most Economically Advantageous Tender (MEAT) approach, where price and quality are assessed together; and (iv) contract management requirements that ensure delivery and verification on site.

BACKGROUND

The Circular Economy Construction demonstrator project (CE-CON) aimed to utilise the Limerick Twenty Thirty Opera Square development in Limerick as a Lighthouse Demonstrator Project for the Circular Built Environment. It was funded by the Environmental Protection Agency (EPA) and led by the Irish Green Building Council (IGBC) in collaboration with partners Atlantic Technological University (ATU), Limerick Twenty Thirty Designated Activity Company (LTT DAC) and the Southern Region Waste Management Office (SRWMO).

This factsheet illustrates how circularity can be embedded at the procurement phase, using Opera Square as a case example.



One Opera Square (under construction)

CASE STUDY

OPERA SQUARE (LIMERICK)

Opera Square is a brownfield site located in the heart of Limerick City Centre. It contained various building structures dating from the 18th to the 20th century. The perimeter of the site, bordering Rutland Street, Patrick Street and Ellen Street is predominantly made up of terraced buildings dating from the Georgian period. There are several buildings on the site with varying levels of heritage value.

The main redevelopment plan involved the demolition of all the twentieth-century buildings and later additions to the rear of existing heritage structures to facilitate new-build elements and proposed renovation and adaptive re-use of the Protected Structures and the other structures of heritage value within the site.

Opera Square provides a practical example of how circular outcomes can be pursued within the Capital Works Management Framework (CWMF). The project was delivered through multiple procurement packages (Contracts A–D), each procured under Public Works Contracts and awarded using the Most Economically Advantageous Tender (MEAT) approach.



One Opera Square (<https://oneoperasquare.ie/>)

HOW THE CONTRACT FORM SHAPED CIRCULAR OPPORTUNITIES ON OPERA SQUARE:

Contract A: PW-CF4 (Contractor-designed civil engineering works):

gives the client strong leverage to score contractor methodologies and engineering solutions at tender stage. This can be used to reward approaches such as sequencing for reuse, site-won material recovery, low-carbon temporary works, and logistics plans that reduce waste. Outcome-focused requirements mattered. Contract A included a minimum waste-diversion target and requirements to utilise information from a pre-demolition audit to deliver resource and waste management.

Contract B: PW-CF2 (Building works designed by the contractor):

is a contract used when the contractor is responsible for both design and construction of building works. It gives two influence points: (1) pre-tender design/specification enabling clients to embed circular design requirements in the early concept stage to ensure CE criteria are adequately embedded within the initial design, and (2) tender evaluation allowing clients to assess contractor delivery capability through tender returns with a focus on project and construction resource and waste management plans.

Circular economy delivered mainly through resource and waste management in the construction phase (rather than explicit 'CE' scoring within tender evaluation and MEAT criteria).

Contracts C&D: PW-CF1 (Employer-designed building works):

gives the client maximum control during design development, but limits tender-stage competition on alternative design solutions. Circular criteria must focus solely on how the contractor will execute the fixed design during the construction stage (plans, sequencing, waste/reuse logistics, reporting). If circular-related design elements are not included in the client's design, the opportunity to achieve CE in the project through procurement is limited to the construction phase through waste reduction initiatives.

Across later contracts (C&D), circularity began to appear in tender evaluations through small but defined weightings within sub-criteria of the MEAT criteria, in requests for Resource & Waste Management Plans (RWMP) and Circular Economy Plans (CEP) for tenders, although these were to be delivered post-award.

LESSONS LEARNED

The following lessons learned from the Opera Project can be applied to future projects:

- The project brief should state clearly how circular economy principles will be implemented on the project.
- Integration of circular plans should commence at concept stage. Early consideration of materials and product's design, use, maintenance and end-of-life will impact circular opportunities on a project.
- Define circular objectives early and carry them through design, tender evaluation (MEAT) and contract management.
- Use measurable, contract-linked indicators (KPIs) rather than relying on broad certification tools alone; specify how evidence will be collected and verified. These should be aligned with EU Taxonomy (EU Level(s)) where possible.
- Make circular criteria 'scoreable': objective, proportional, linked to the contract's subject matter, and described in terms familiar to market participants (e.g., RWMP, CEP, waste-tracking outputs).
- Set meaningful weightings within MEAT criteria, very low weightings may be symbolic and unlikely to influence competition outcomes.
- Explore regulatory pathways (by-product/end-of-waste) acting in parallel with design and procurement to avoid missing reuse windows later in the programme.
- Use consistent digital tracking (e.g., SmartWaste or equivalent) and consider independent review to strengthen confidence in reported outcomes.
- LEED and BREEAM certifications recognise good practice in building design through a credit-based approach; however certification alone does not guarantee circular outcomes. Where CE principles are a priority, relevant credits must be explicitly required within project design and specifications.
- Public Sector Contracts example PW-CF1 (Employer-designed building works) provided the greatest opportunity for delivery of CE principles on a project.



Piling Mat spread across the Opera Square site

KEY FINDINGS FROM OPERA SQUARE CASE EXAMPLE

Early collaboration at the concept stage among stakeholders, contractors, clients and designers is integral to the implementation of circular economy principles to a project.

Inclusion of circular requirements, practices and principles in contract documentation at the concept stage can lead to a significant reduction in the environmental impact of the construction process.

Include measurable circular performance-based criteria in the tendering and procurement documents (KPIs).

The pre-demolition audit process is the best tool for identifying and quantifying materials and components that can be reclaimed, reused, or recycled prior to the start of construction.

The establishment of separate recovery targets for each waste stream will enhance environmental outcomes.