



LCi Vision for the Irish Construction Sector

June 2021

Contents

1. Enabling Sectoral Transformation.....	3
1.1. Introduction	3
1.2. LCi Purpose	3
1.3. Business Case for Lean Transformation	3
1.4. LCi Ideal State	4
1.5. Breakthrough Initiatives	5
2. LCi Client Forum	6
2.1. Client Forum Purpose	6
2.2. Client Forum Strategy Phases	6
3. LCi Background.....	8
3.1. Core Values	8
3.2. Aims	8
3.3. Breakthrough Objectives	8
3.4. LCi Stakeholders	9
Appendix 1. LCi Board of Directors	10
Appendix 2. LCi Client Forum Members	11
Appendix 3. LCi Corporate Members (June 2021)	13

I. Enabling Sectoral Transformation

I.1. Introduction

The Irish construction sector has been undergoing significant changes in recent years, with the objective of improving safety, quality, schedule, and productivity through the adoption of digitalisation, new technologies, modern methods of construction, and Lean thinking and practices.

This document provides background information on Lean Construction Ireland (LCi); it details the purpose of LCi and the business case for Lean transformation; it outlines the LCi vision of the ideal state of the Irish construction sector and the LCi breakthrough initiatives to reach that ideal state; and refers to alignment with key national and international strategic objectives and reports.

An overview of the LCi Client Forum is provided, detailing its role as the lead advocate for the adoption of Lean on public and private capital projects, along with the Client Forum strategy to progress various action areas, and develop discussion documents for engagement with the wider Irish construction sector, stakeholders, and contractors and their associated supply chain.

The LCi Client Forum invites your organisation to collaborate in the co-development of a sectoral Lean Deployment Strategy underpinned by more relational-oriented and collaborative approaches to the design and delivery of capital projects as well as in the procurement and contractual processes.

I.2. LCi Purpose

LCi is a community of learning and practice that advocates for the transformation of the Irish construction sector through the adoption of Lean thinking and practices by the entire sector to enable and sustain enhanced effectiveness, efficiency, productivity, and profitability for all stakeholders in the value chain.

I.3. Business Case for Lean Transformation

- i. **Clients** demand a new way to design and deliver capital projects in order to attain greater value-add and enhanced return on investment.
- ii. **Contractors and Associated Supply Chain** seek more value-adding, relational-oriented, and collaborative ways of working with one another and their Clients.
- iii. LCi has initiated a project to research and document suitable models, templates, and language that enable **Lean in the procurement and contractual processes** (see I.5.i below).
- iv. LCi has initiated a project to develop a “**Lean and Enterprise Excellence Maturity Assessment Model**” (see I.5.ii below).
- v. **DPER** (see I.6.i below) emphasises a “collaborative and mutually supportive relationship between clients and delivery partners” (p.II of report).
- vi. **McKinsey** (see I.6.viii below) recommends “Reinventing Construction” (p.vi) given that “Global Construction has a Productivity Problem” (pp.I5-31 of report).

The Business Case for Transformation

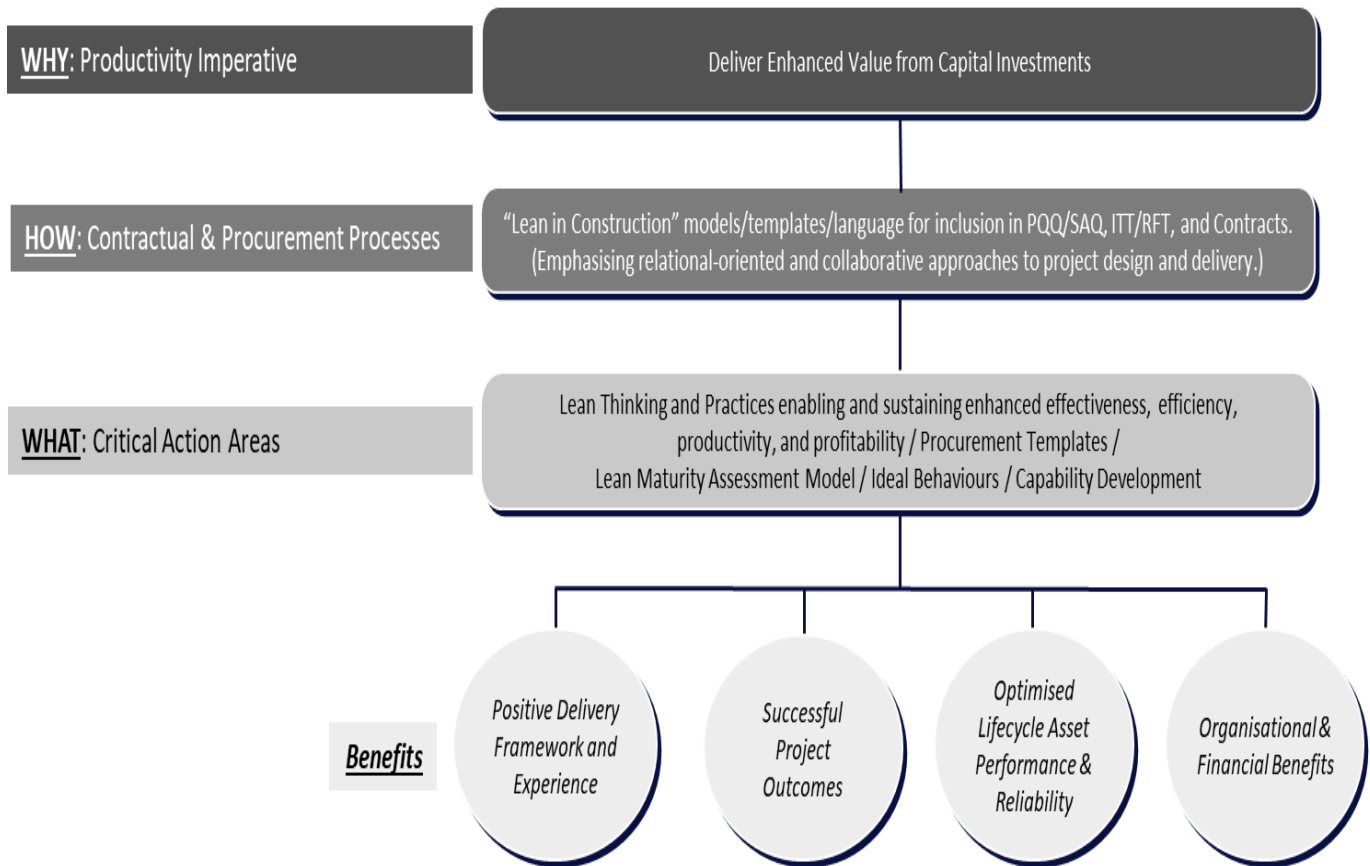


Figure 1. The Business Case for Lean Transformation

1.4. LCI Ideal State

LCi envisions the Irish construction sector "Ideal State" will be founded on:

- respect every individual; respect the process; respect the planet; continuous improvement
- inclusivity; representation; partnership; collaboration
- open and transparent engagement, trust, and communications
- value; next-customer mindset; flow; pull; productivity; performance
- proactive problem-solving and learning organisations
- operational and enterprise excellence
- technology and digitalisation
- lifecycle mentality and sustainable development
- relational-oriented contractual and procurement processes

1.5. Breakthrough Initiatives

LCi has initiated several projects on areas deemed “breakthrough” in nature to enable and sustain sectoral transformation. These projects include:

- i. **Lean in Procurement & Contractual Processes** – research and document applicable models, templates, and language that enable Lean in the procurement and contractual processes, and which may be adopted on a project-by-project basis.

These will be presented as options that complement current sectoral contract models and global best practices. The emphasis being on more relational-oriented and collaborative approaches to project design and delivery, and they will enable the systemic deployment and fulfilment of Lean across the Irish construction sector.

- ii. **Lean and Enterprise Maturity Assessment Model** – development of a maturity model as the standard for the sector to enable organisations to assess their Lean and Enterprise Excellence Maturity, as well as to enable Clients evaluate the Lean and Enterprise Excellence Maturity of Contractors and Associated Supply Chain organisations in the procurement and contractual processes.
- iii. **Ideal Behaviours** – development of a list of ideal behaviours to be used as a sectoral “Credo” and basis for alignment within and between sectoral organisations.
- iv. **Course Portfolio** – development of a course portfolio (White Belt, Yellow Belt, Green Belt, Black Belt) as the standard for the sector in Lean Construction training and certification.
- v. **Capital Projects Pipeline** – development of a comprehensive “pipeline” mapping public and private capital projects to enable the sector to more effectively and efficiently plan and collaborate in terms of capacity, resources, personnel, raw materials, and equipment.

1.6. National and Global Context & Alignment

LCi strategy development and deployment is aligned with national strategic objectives and key global reports, including:

- i. Department of Public Expenditure & Reform: *Economic analysis of productivity in the Irish construction sector*
- ii. Department of Public Expenditure & Reform: *Build Digital*
- iii. Department of Public Expenditure & Reform: *Construction Sector Group* and *Innovation and Digital Adoption Sub-Group*
- iv. Department of the Environment, Climate and Communications: *Sustainable Development Goals*
- v. Department of the Environment, Climate and Communications: *Green Public Procurement*
- vi. *National Competitiveness & Productivity Council*
- vii. *EU Circular Economy Action Plan: <https://ec.europa.eu/environment/circular-economy/>*
- viii. McKinsey Global Institute: *Reinventing Construction: A Route to Higher Productivity*

2. LCI Client Forum

2.1. Client Forum Purpose

The purpose of the LCI Client Forum is to provide lead advocacy for the adoption of Lean thinking and practices throughout the Irish construction sector, and to drive, enable, and sustain the requisite sectoral transformation and continuous improvement.

The LCI Client Forum will achieve this through providing an inclusive, representative, collaborative, and collegial environment wherein Lean Construction thought leadership, best practices, and industry standards are nurtured, championed, and deployed.

The LCI Client Forum encompasses public and private capital project clients, their professional services providers (PSP), and other relevant contributors.

2.2. Client Forum Strategy Phases

The Client Forum Strategy encompasses three key phases across 2019-2023.

Phase I: Q4-2019 through Q4-2021 – Strategic Alignment Phase

- **Lean in Procurement & Contractual Processes**
 - i. Researched various contract models and global best practices, and presented at LCI Conference.
 - ii. Commenced scoping the various Lean in procurement and contractual processes options, models, templates, and language.
- **Lean and Enterprise Excellence Maturity Assessment Model**
 - i. Researched maturity models globally and across various sectors.
 - ii. Commenced scoping of Irish construction sector maturity model.
- **List of Ideal Behaviours**
 - i. Researched approaches to behaviours across various organisations/sectors.
 - ii. Commenced scoping of sectoral data gathering instrument.
- **Public Sector Client Summary of Lean Thinking and Practices**
 - i. Documented Lean initiatives implemented on public projects.
 - ii. Planning key stakeholder engagement.
- **Strategy to Engage Contractors & Associated Supply Chain**
 - i. Scoped communications strategy and approach.

ii. Planning engagement initiatives.

Phase II: Q2-2021 through Q4-2021 – Contractors & Supply Chain Engagement Phase

- Understand perspectives and positions on Lean in Construction.
- Capture input on the Ideal State and Action Areas.
- Identify actual/potential obstacles and barriers to a Sectoral Lean Deployment Strategy.

Phase III: Q1-2022 through Q4-2023 – Strategy Deployment Phase

- Co-develop a Sectoral Lean Deployment Strategy.
- Adopt Lean Construction thinking and practice as the preferred method of design, delivery, and general operations on participating Clients' capital projects.

3. LCI Background

3.1. Core Values

- Leadership
- Integrity
- Knowledge
- Innovation
- Collaboration
- Commitment
- Teamwork

3.2. Aims

- i. **Promote** the application of Lean thinking and practices across the Irish construction sector.
- ii. **Develop** a network of members committed to the application of Lean thinking and practices nationally and internationally.
- iii. **Challenge** traditional project thinking and delivery methods, and procurement and contractual processes.
- iv. **Advance** Lean Construction knowledge, know-how, and skills amongst all stakeholders.

3.3. Breakthrough Objectives

- Lead the adoption of Lean thinking and practices on capital projects.
- Collaborate with Professional Service Providers to enable Lean project design and delivery approaches.
- Drive the transition to more relational-oriented and collaborative contract models.
- Sponsor the integration of Lean into Tenders and Pre-Quals.
- Support whole-project learning and continuous improvement within projects and across projects.

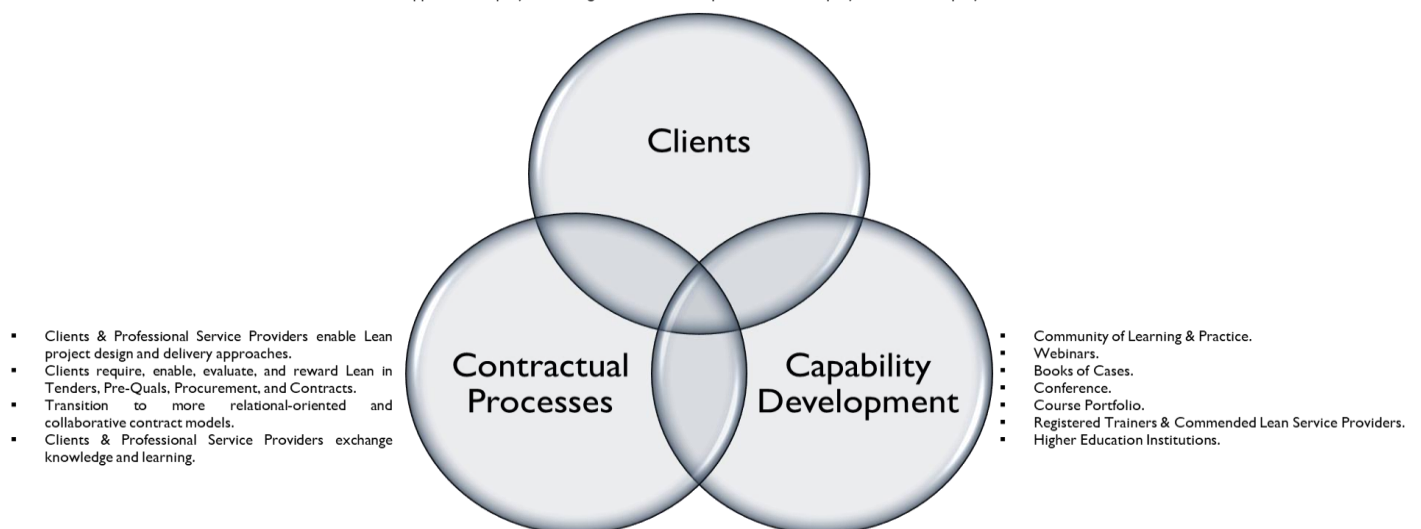


Figure 2. LCi Breakthrough Objectives

3.4. LCi Stakeholders

- Clients and Owners
- Contractors & Associated Supply Chain
- Professional Services Providers
- Academia
- Lean Service Providers (Consultants/Trainers)
- Professional Bodies
- Representative Bodies
- State Agencies
- Ireland Inc.

Appendix I. LCI Board of Directors

Name	Organisation
Richard Fitzpatrick (Chairperson)	National Paediatric Hospital Development Board
Jason Casey (Vice-Chairperson)	Ardmac
Angelyn Rowan (Company Secretary)	Philip Lee Solicitors
Kevin White (Treasurer)	Jones Engineering Group
Dr. Derek Sinnott	Waterford Institute of Technology
Anthony Carter	Global Pharmaceutical Company
Éamonn Conlon	Senior Counsel
Dr. Avril Behan	Technological University Dublin
Joe O'Sullivan	Sisk
George Farquhar	Irish Water
Eibhlín O'Connor	Clúid Housing
Seamus Lacey	Mercury
Dr. Denis Leonard	GRAHAM
Imelda Mannion	Jacobs
Trevor McSharry	Institute of Technology Sligo

Special Advisor to the Board of Directors

Darrin Taylor	Waterford Institute of Technology
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Appendix 2. LCI Client Forum Members

Name	Organisation
Richard Fitzpatrick (Chairperson/Client)	National Paediatric Hospital Development Board
Darrin Taylor (Strategic Advisor)	Waterford Institute of Technology
Anthony Duffy (Client)	Transport Infrastructure Ireland
George Farquhar (Client)	Irish Water
Louis Gunnigan (Client)	Technological University Dublin
Robert Moore (Client)	Grangegorman Development Agency
Stephen Byrne (Client)	Dublin Airport Authority
Manu Lejeune (Client)	Dublin Airport Authority
Mark Bourke (Client)	Dublin City Council
Paul Defreine (Client)	HSE (Estates)
Colin Cleary (Client)	HSE (Estates)
Aidan McGovern (Client)	Office of Public Works
James Fegan (Client)	MSD
Anthony Carter (Client)	Global Pharmaceutical Company
Mattie Dwane (Client)	Alexion
Angelyn Rowan (PSP)	Philip Lee Solicitors
Éamonn Conlon (PSP)	Senior Counsel

Name	Organisation
Alison Bearpark (PSP)	Ronan Daly Jermyn Solicitors
Colm Tully (PSP)	AECOM
Maurice Gillen (PSP)	Jacobs
Michael Kerr (PSP)	PM Group
William Power (PSP)	DPS Group
Aiden O'Dwyer (PSP)	DPS Group
Patrick Carney (PSP)	RKD Architects

Appendix 3. LCI Corporate Members (June 2021)

ACB Group Ltd.	Erith Contractors Ltd.	Midland Steel Supplies Ltd.
Alexion	Errigal Contracts Ltd.	Modubuild
Apex Fire Ltd.	Eversheds Sutherland	MSD
ARCDOX Ltd.	Excell Sealants Ltd.	Murphy Geospatial
Ardmac	Exyte Northern Europe	National Pediatric Hospital Development Board
Asgard Cleanroom Solutions Ltd.	Fluor Ireland Limited	Oak Project Management Limited
Autodesk Ltd.	Glounthaune Property Dev Ltd.	OutForm Consulting
BAM Civil Ltd.	Grangegorman Development Agency	Philip Lee Solicitors
BMD & Co. Ltd.	Gravity Construction	PM Group
Brian A. Flynn Ltd.	Institute of Technology Sligo	Procore
Bridgewater Homes Limited	Intel Ireland Ltd.	Radley Engineering Ltd.
CField Construction	J.F Hanley Fencing & Ground Care	Rascor Waterproofing Ltd.
Clancy Construction	J. Manning & Son (Dublin) Limited	Roadbridge
Cleary Doyle Construction Ltd.	Jacobs	ROSS Engineering GHC Ltd.
Cluain Limited	John Paul Construction	RP Consulting Ltd.
Clúid Housing Association	Jones Engineering Group	Sheahan & Collins Construction
Coftec	KCC Group	SISK
Collen Construction Ltd.	KEMMLIT Ireland Limited	Sonica

Conack Construction Ltd.	Kiernan Structural Steel Ltd.	Specialist Technical Services
Core Group	Kirby Group Engineering Ltd.	Survey Instrument Services
Crystal Lean Solutions	Kyron Innovative Technologies	Technological University Dublin
DAA	LBS Partners	T&I Fitouts Ltd.
Designer Group	Leamore Construction	Townmore
Digital Asset Delivery (Europe)	Levelling Equipment Services	Vision Contracting Ltd.
Dolmen Engineering	Linesight	Walls Construction
Dornan Engineering Limited	Mace Technology Ireland	Walsh Mechanical Engineering
DPS Group	MCR Group	Weslin Construction Limited
Duggan Brothers	Mercury	Waterford Institute of Technology