

Using the DeliveREE project development model

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Housekeeping

- Participant audio and video muted
- This session is being recorded
- Submit questions via chat
- Slides will be sent by email after the session
- Q&A Session / Discussion at end



Agenda / Project Stages

1. Introduction to DeliveREE
2. Organisation wide decarbonisation pathway
3. Project Appraisal – *Decarbonization Assessment Report*
4. Project Initiation – *Project Business Case*
 - Pathfinder funding
5. Procurement
 - Value for money assessment
6. Developed and Detailed Design
7. Discussion, Q&A session



CODEMA TEAM

- **Energy Advisers** to Dublin Local Authorities
- Founded in **1997** as **not-for-profit** organisation
- **35 staff** based in The Digital Hub



Our expertise



Energy planning,
policy and research



Public sector
obligations



Best-practice
engagement



Large-scale
project roll-out



Project funding and
facilitation



DeliveREE Project Background



The Aim

1. Create a **Project Implementation Unit**
2. Create a **delivery model** that can be replicated
3. Deliver **9 signed Energy Performance Contracts**

The Partnership

1. Codema
2. Resourceful Futures Ltd (**Legal & Commercial**)
3. Philip Lee Solicitors Ltd (**Legal**)
4. Sustainable Development Capital LLC (**Financial**)
5. Local Authorities (**Projects**):
 - Dublin City Council
 - Dun Laoghaire-Rathdown Council
 - Fingal County Council
 - South Dublin County Council



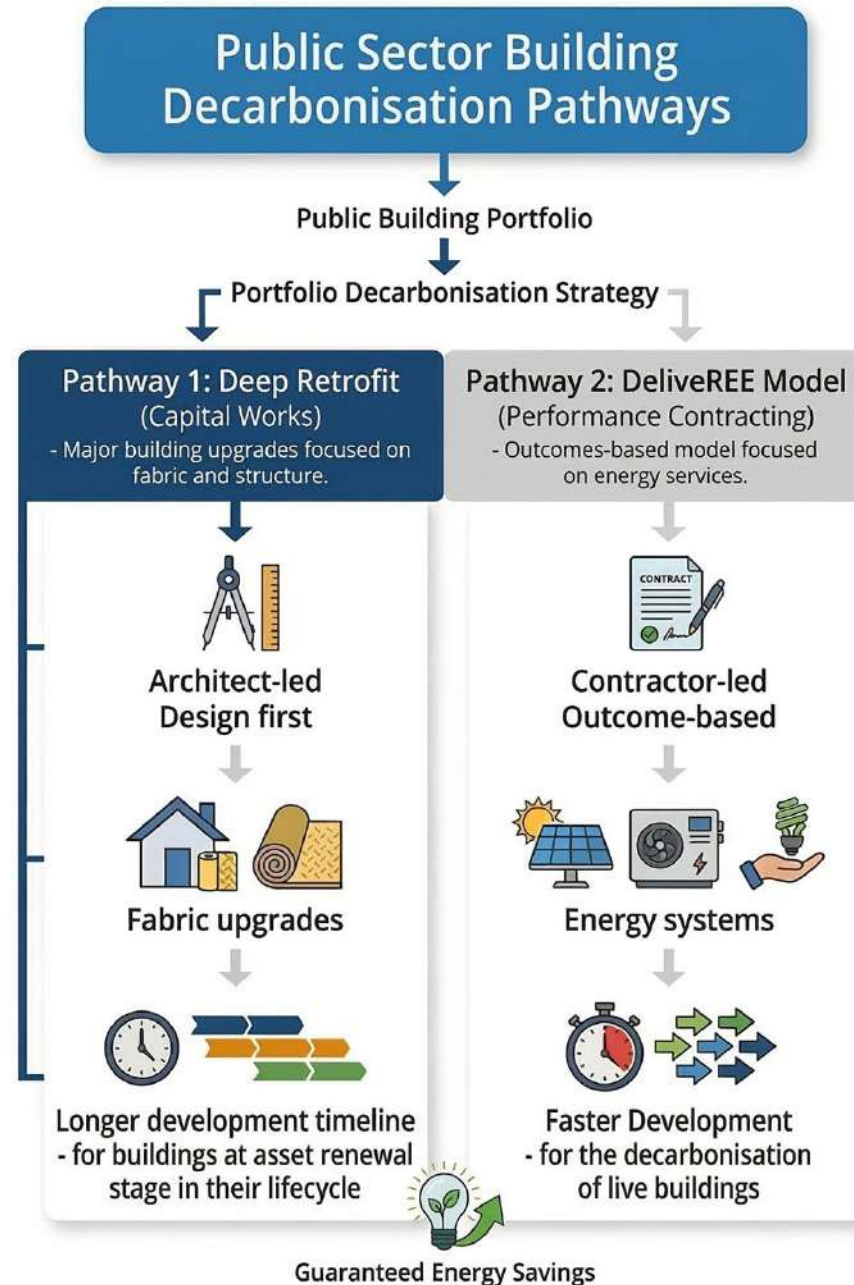
DeliveREE Project - In Numbers

Metric	Initial Target	Current Result (awarded contracts)	Total (Inc. 2026 Pipeline)
Total Investment / Contracts	€20.4m	€21m	€46m
Private Investment	€9.75m	€2.9m	€6.7m
Energy Savings (GWh/yr)	24.0	15.5	29.4
CO2 Reduction (tCO2/yr)	3,977	2,797	6,269



When to use The DeliveREE Model

- The first step in the model is using Gap-to-Target analysis to prioritise buildings
- This helps separate the Deep Retrofit projects from the Decarbonisation projects

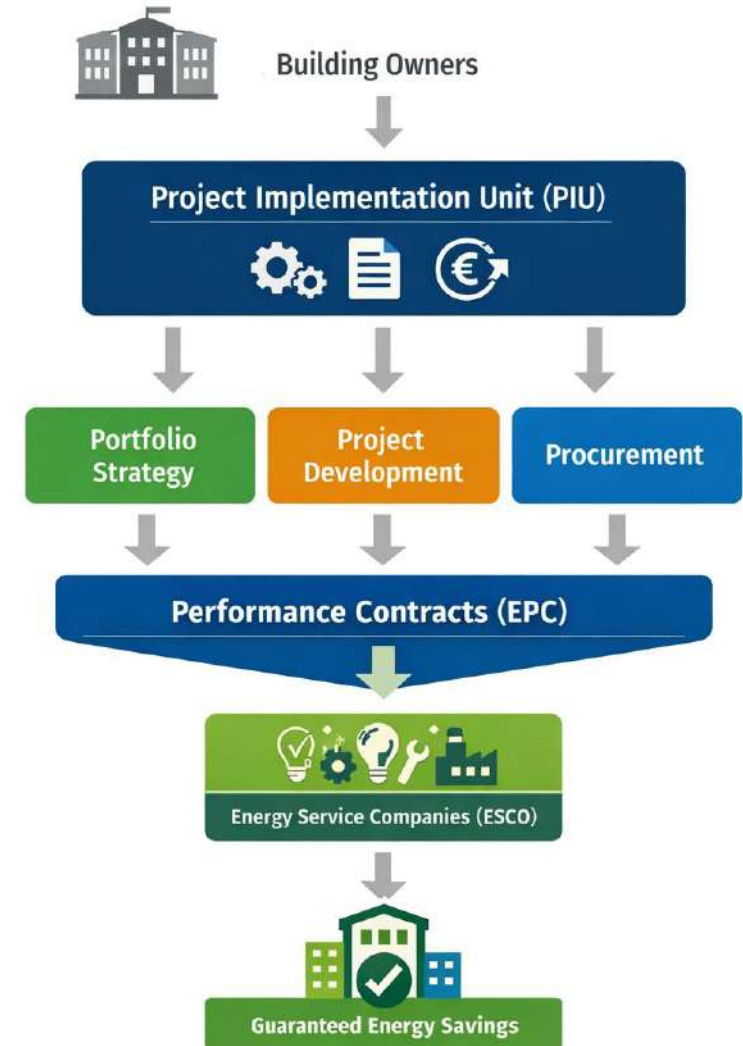




The DeliveREE Model - PIU

The **Project Implementation Unit (PIU)**

- concentrates the technical, commercial and procurement expertise
- allows building owners to participate without having to manage complex processes individually
- support structure for internal staff
- standardising project development and procurement

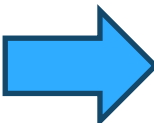




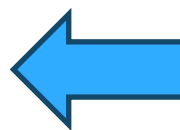
DeliveREE Delivery Model



Step 1 – Review building portfolio - Gap-to-target and the most significant energy users



Step 2 – Separate into two groups – Large and everything else



Step 3 – Large Building Framework

- EPC – typically 8 year contracts
- Approx. value €5m to €10m)
- Mini competition for each project



(MEEU example - 12 buildings)

Step 4 – Small Building Framework

- Energy Guarantee - *Design-Build-Commissioning* projects
- 2 year guarantee period
- Appox - €100k to €1.5m.
- Cascade System - contractor No.1 gets first offer of every project.



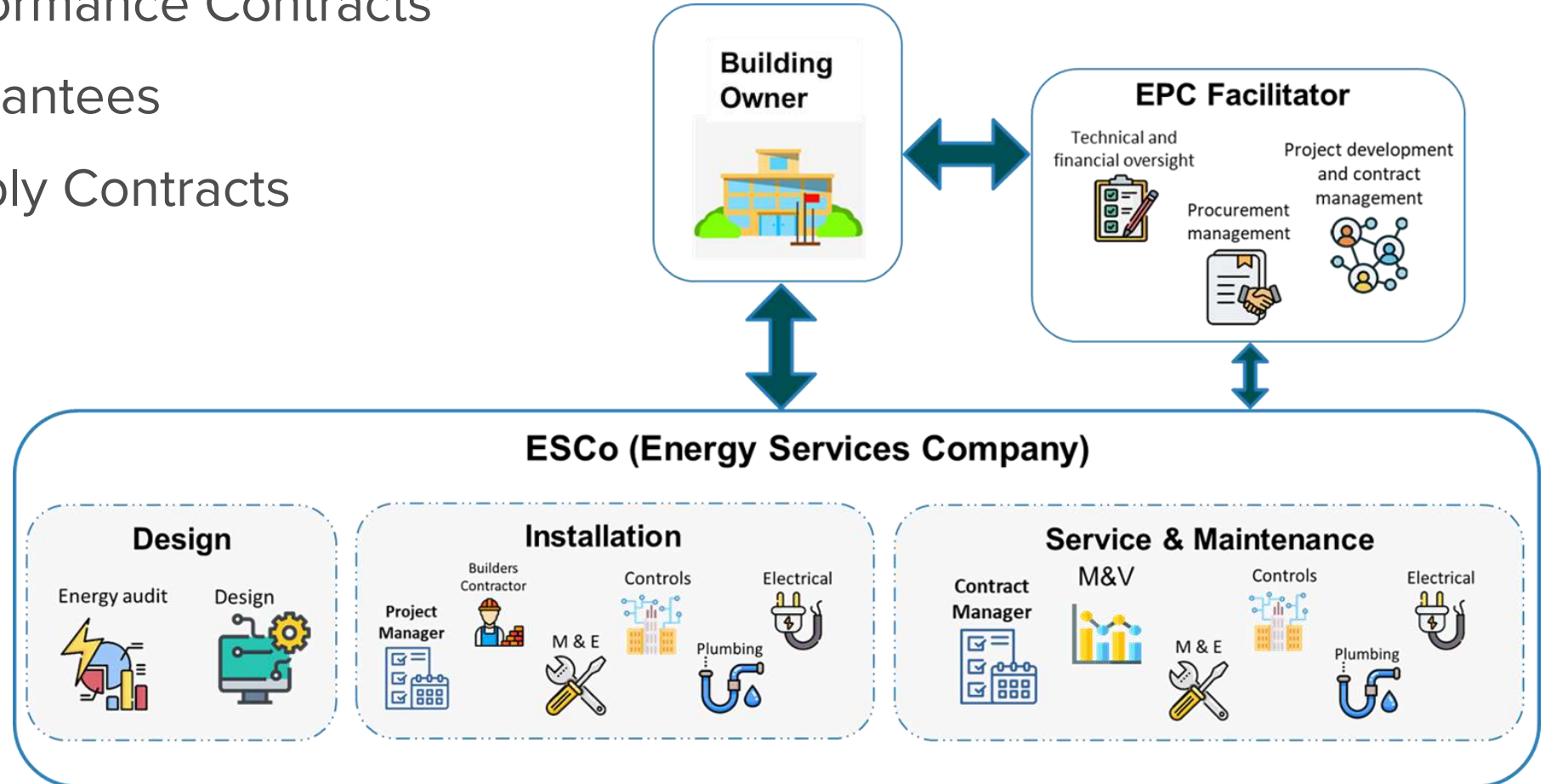
(MEEU example – 40 buildings)





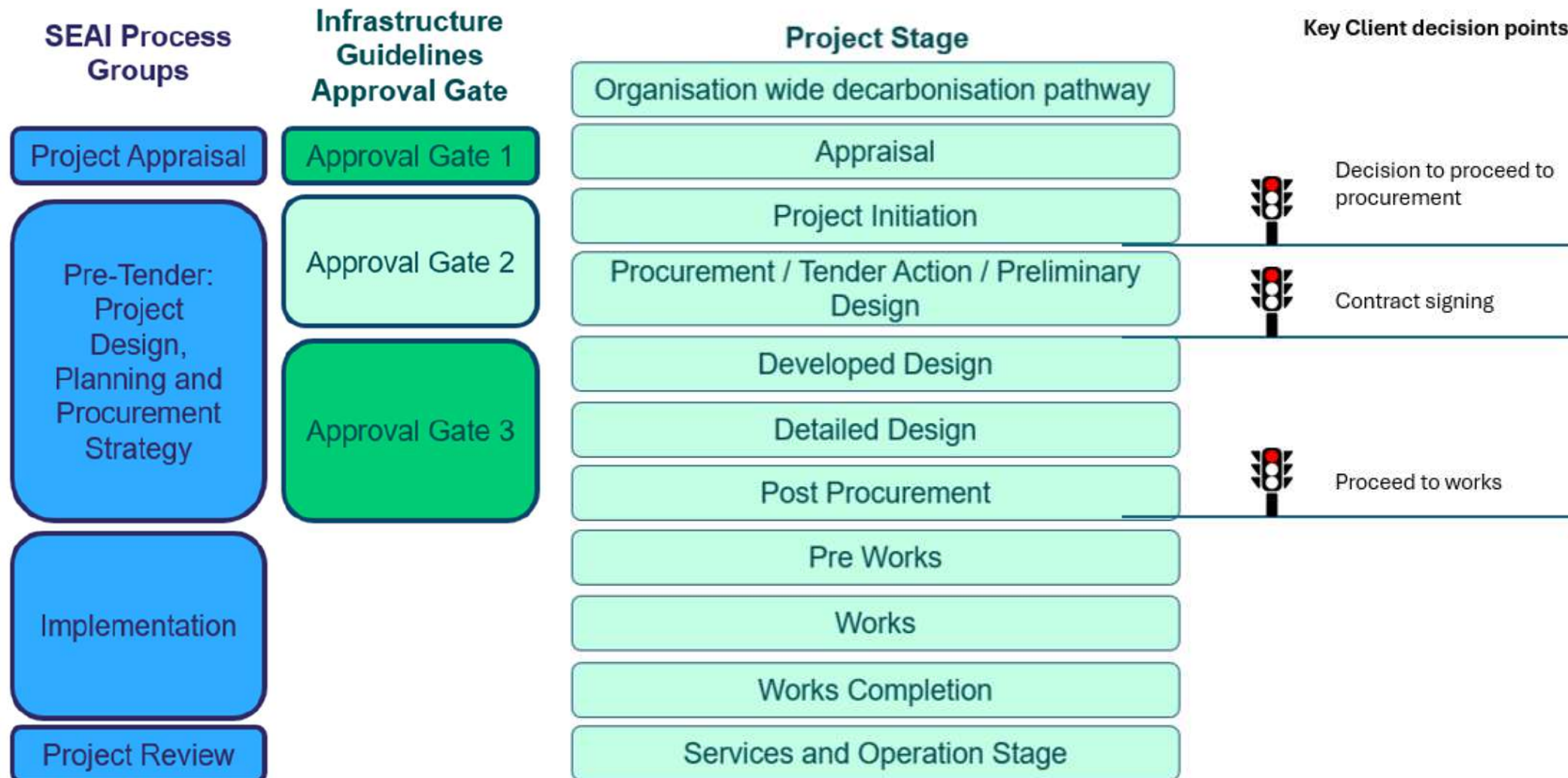
Contracts - Decarbonisation Partnership

- Energy Performance Contracts
- Energy Guarantees
- Energy Supply Contracts





How are projects developed?





How are projects developed?

Project Stage	Deliverable/Activity	DeliveREE PIU (Facilitator)	LA/Client	SEAI	Pathfinder Steering Group	ESCo	Client Legal representative	Client EED/Technical Advisor	Client Cost Control representative	
Org decarb	Project Stage	DeliveREE PIU (Facilitator)	LA/Client	SEAI	Pathfinder Steering Group	ESCo	Client Legal representative	Client EED/Technical Advisor representative	Client Cost Control representative	
Proc	DeliveREE Project Final Milestone		DeliveREE Project Final Milestone							
	Developed Design	Refine M&V Plan	Oversight	Oversight/Approval			Lead			
		Developed Design Report/ Upload to database for Client review	Support	Oversight/Approval			Lead		Oversight	Support
		Challenge and Analyse (1)	Support	Support			Respond		Lead	Support
		Planning application	Support	Lead			Respond			
	Detailed design	Detailed Design Report	Support	Oversight/Approval			Lead		Support	Support
		Challenge and Analyse (2)	Support				Support		Lead	Support
		Works Planning/ Schedule of Works	Support	Oversight/Approval			Lead			
		EPC Detailed Design and Cost Evaluation Report	Support	Oversight						Lead
	Pre-Works	Pre Works BER Assessment	Support				Lead			
		Post Occupancy Evaluation Plan	Support				Lead		Review	
		Commissioning plan	Support				Lead		Review	
		Project Execution Plan (Final)	Support	Lead			Support		Support	
	Works	Site Inspection Reports	Support	Approval			Oversight		Lead	
		Quarterly Approved Project Programme Report	Support	Approval			Lead		Review	
		Commissioning Report	Support	Approval			Lead		Approval	
		EED Project Summary Report	Support	Approval					Lead	
	Works Completion	Post Works BER Assessment	Support	Approval			Lead			
		Certificate of Substantial Completion (Handover)	Support	Approve			Lead		Approval	Oversight
		Funding Drawdown Request (Final Payment)	Support	Lead	Approval	Approval				
Measurement and Verification Report		Oversight	Approval			Lead		Approval		
Service and Operation Stage	Post Occupancy Evaluation and Monitoring	Oversight	Approval			Lead		Approval		
	Project Completion Report	Oversight	Approval			Lead		Approval		
	Services period/ Defects Certificate	Oversight	Approval			Lead		Approval		
	Funding Drawdown Request (First Payment)		Lead	Approval	Oversight					



How are projects developed?

Project Stage	Deliverable/Activity	DeliverE E PIU (Facilitator)	LA/Client	SEAI	Pathfinder Steering Group	ESCo	Client Legal representative	Client EED/Technical Advisor representative	Client Cost Control representative
Organisation wide decarbonisation pathway	Gap to Target	Support	Lead	Informed					
Appraisal	Decarbonisation Assessment Report (audit)	Lead	Oversight/Approval						
	Project procurement and outcomes definition	Support	Lead						
	Stakeholder mapping exercise	Support	Lead						
	Pathfinder Check-in	Support	Lead	Oversight/Approval					
Project Initiation	Market Engagement	Lead							
	Temporary metering (collect data and define baseline)	Lead	Support						
	Surveys	Support	Lead						
	Project Appraisal Report	Lead	Oversight/Approval						
	Team establishment and Client Decision to Proceed to Procurement	Support	Lead	Informed					
	State Aid Assessment (Pathfinder)	Support	Oversight/Coordination	Oversight/Approval	Approval		Lead		
	Pathfinder programme Preliminary Business Case	Support	Lead	Oversight/Approval	Approval				
	Pathfinder programme Project Selection Matrix	Support	Lead	Oversight/Approval	Approval				
	Pathfinder programme Project Selection Report	Support	Lead	Oversight/Approval	Approval				



Organisation Wide Decarbonisation Pathway

(Public sector organisations)

Buildings portfolio

The “Gap-To-Target” tool

3 targets

- Energy efficiency
- Total CO2
- **Direct Emissions (Thermal and Transport)**



- Separate into groups of Large / Medium / Small buildings (annual consumption, energy spend, floor area etc.)
- Where does it make sense to concentrate effort? (Does the 80/20 rule of thumb apply?)
- Are we doing a **deep retrofit** or **decarbonisation** project at each of these buildings?
- How will we deliver these projects?
 - Large building EPC framework
 - Medium/small building framework



Model impact in the GTT tool



Organisation Wide Decarbonisation Pathway

(Non public sector organisations)

Buildings portfolio

The same process with a different starting point

What is the target your organisation is working towards?



Create a database of historic energy consumption

- Separate into groups of Large / Medium / Small buildings (annual consumption, energy spend, floor area etc.)
- Where does it make sense to concentrate effort? (Does the 80/20 rule of thumb apply?)
- Are we doing a **deep retrofit** or **decarbonisation** project at each of these buildings?
- How will we deliver these projects?
 - Large building EPC framework
 - Medium/small building framework



Model impact against target



How are projects developed?

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Organisation wide decarbonisation pathway	Gap to Target	Support	Lead	Informed				
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		Project procurement and outcomes definition	Support	Lead				
		Stakeholder mapping exercise	Support	Lead				
		Pathfinder Check-in	Support	Lead	Oversight/Approval			
	Market Engagement	Lead						
	Temporary metering (collect data and define baseline)	Lead	Support					
	Surveys	Support	Lead					
	Project Appraisal Report	Lead	Oversight/Approval					
	Project Initiation	Team establishment and Client Decision to Proceed to Procurement	Support	Lead	Informed			



Project Appraisal



Table 10: Proposed Decarbonisation Measures

Code	Measure	Potential Electricity Saved kWh/yr	Potential Gas Saved kWh/yr	Potential Carbon Saved T/yr	Approx. installed cost €	Potential Cost Saving €/yr	Approx. payback period years	Comments
Phase 1								
E1	Install Solar PV	60,000	0	21	€105,000	€12,000	8.8	Based on 186 panels (78 kWp). Financial evaluation is sensitive to electricity prices.
E2	Install 150Kw Air Source Heat Pump	-129,000	547,000	69	€200,000	€45,310	4.4	Based on existing boiler efficiency of 81% and heat pump efficiency of 300%. Financial evaluation is sensitive to gas and electricity prices.
E3	Implement Energy Management system and staff awareness campaign. Install sub-metering and monitoring system to monitor EnPIs	14,538	44,355	14		€8,674	-	5% saving based on typical savings through implementing energy management, monitoring EnPIs and staff awareness.
E4	Upgrade BMS	29,076	88,711	28	€20,000	€17,348	1.2	Assumed reduction of 10% energy use through improved heating control via BMS (as evident by low R ² value in figure 10)
Phase 2								
E5	Install Additional 400Kw Heat Pump	-255,000	613,000	40	€370,000	€28,690	12.9	An additional air source heat pump to meet 100% of all space and water heating demand.
Total					€695,000	€112,022	6.2	

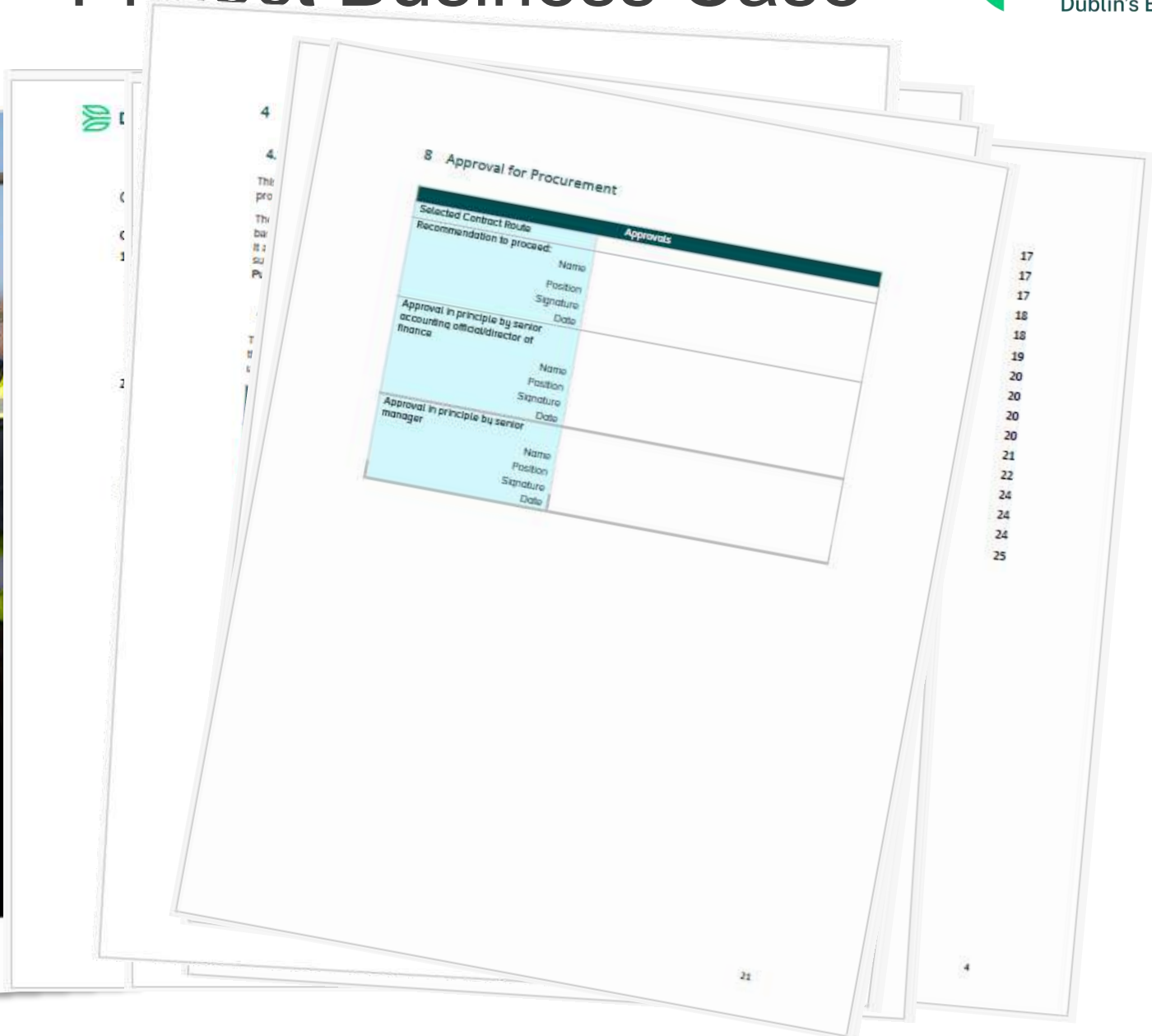
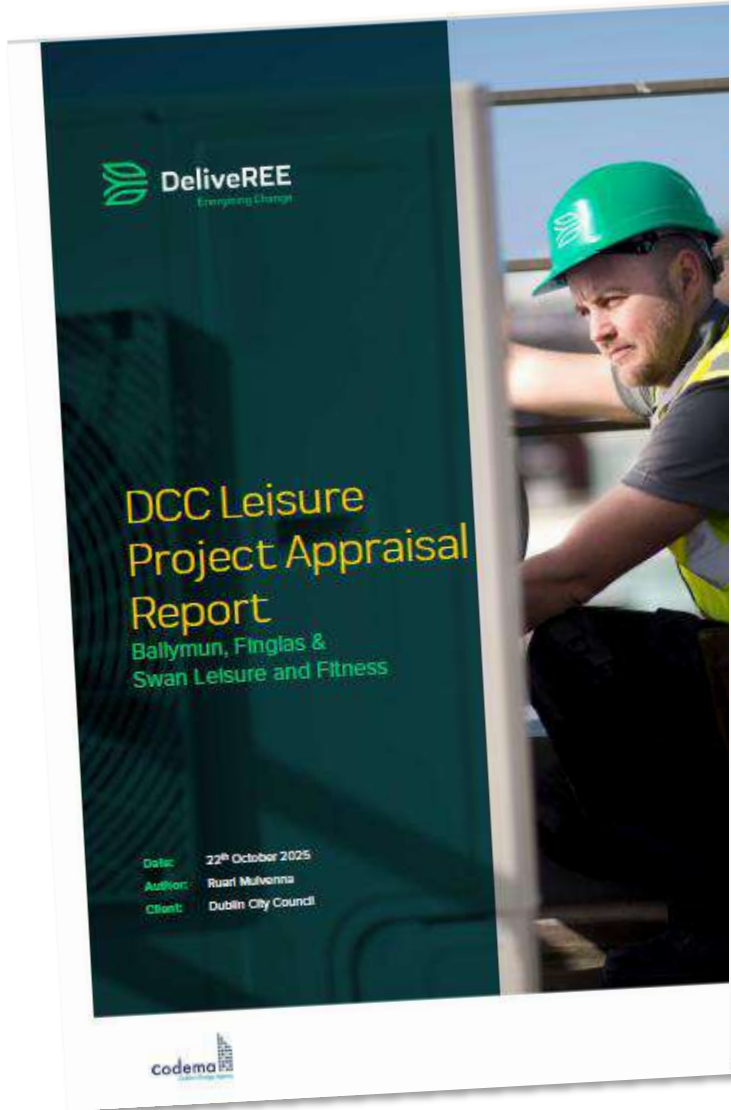


How are projects developed?

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	Project procurement and outcomes definition	Support	Lead				
	Stakeholder mapping exercise	Support	Lead				
	Pathfinder Check-in	Support	Lead	Oversight/Approval			
Project Initiation	Market Engagement	Lead					
	Temporary metering (collect data and define baseline)	Lead	Support				
	Surveys	Support	Lead				
	Project Appraisal Report	Lead	Oversight/Approval				
	Team establishment and Client Decision to Proceed to Procurement	Support	Lead	Informed			
	State Aid Assessment (Pathfinder)	Support	Oversight/Coordination	Oversight/Approval	Approval		Lead
	Pathfinder programme Preliminary Business Case	Support	Lead	Oversight/Approval	Approval		
	Pathfinder programme Project Selection Matrix	Support	Lead	Oversight/Approval	Approval		
Pathfinder programme Project Selection Report	Support	Lead	Oversight/Approval	Approval			



Project Initiation – Project Business Case





How are projects developed?

Project Stage	Deliverable/Activity	DeliveREE PIU (Facilitator)	LA/Client	SEAI	Pathfinder Steering Group	ESCo	Client Legal representative
Organisation wide decarbonisation pathway	Gap to Target	Support	Lead	Informed			
Appraisal	Decarbonisation Assessment Report (audit)	Lead	Oversight/Approval				
	Project procurement and outcomes definition	Support	Lead				
	Stakeholder mapping exercise	Support	Lead				
	Pathfinder Check-in	Support	Lead	Oversight/Approval			
Project Initiation	Market Engagement	Lead					
	Temporary metering (collect data and define baseline)	Lead	Support				
	Surveys	Support	Lead				
	Project Appraisal Report	Lead	Oversight/Approval				
	Team establishment and Client Decision to Proceed to Procurement	Support	Lead	Informed			
	State Aid Assessment (Pathfinder)	Support	Oversight/Coordination	Oversight/Approval	Approval		Lead
	Pathfinder programme Preliminary Business Case	Support	Lead	Oversight/Approval	Approval		
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	Pathfinder programme Project Selection Report	Support	Lead	Oversight/Approval	Approval		



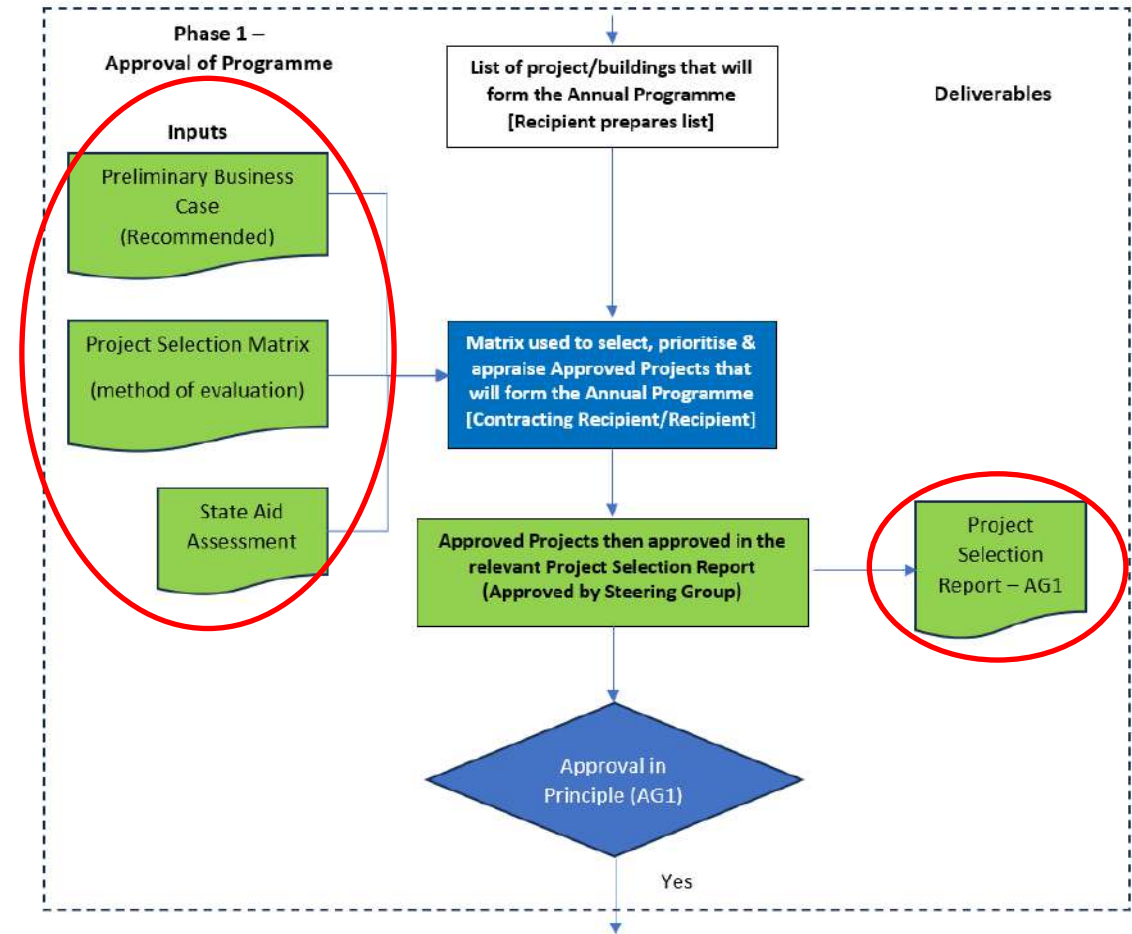


Pathfinder

Pathfinder is a funding support programme for Public Sector Organisations undertaking building retrofit projects

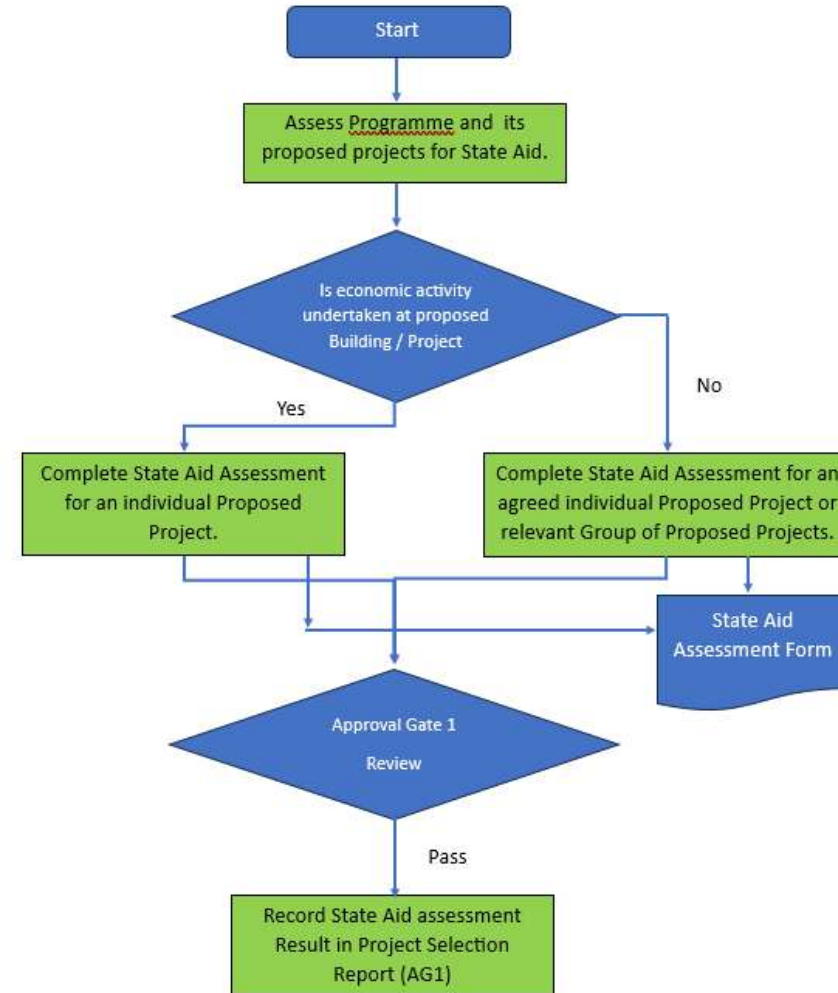
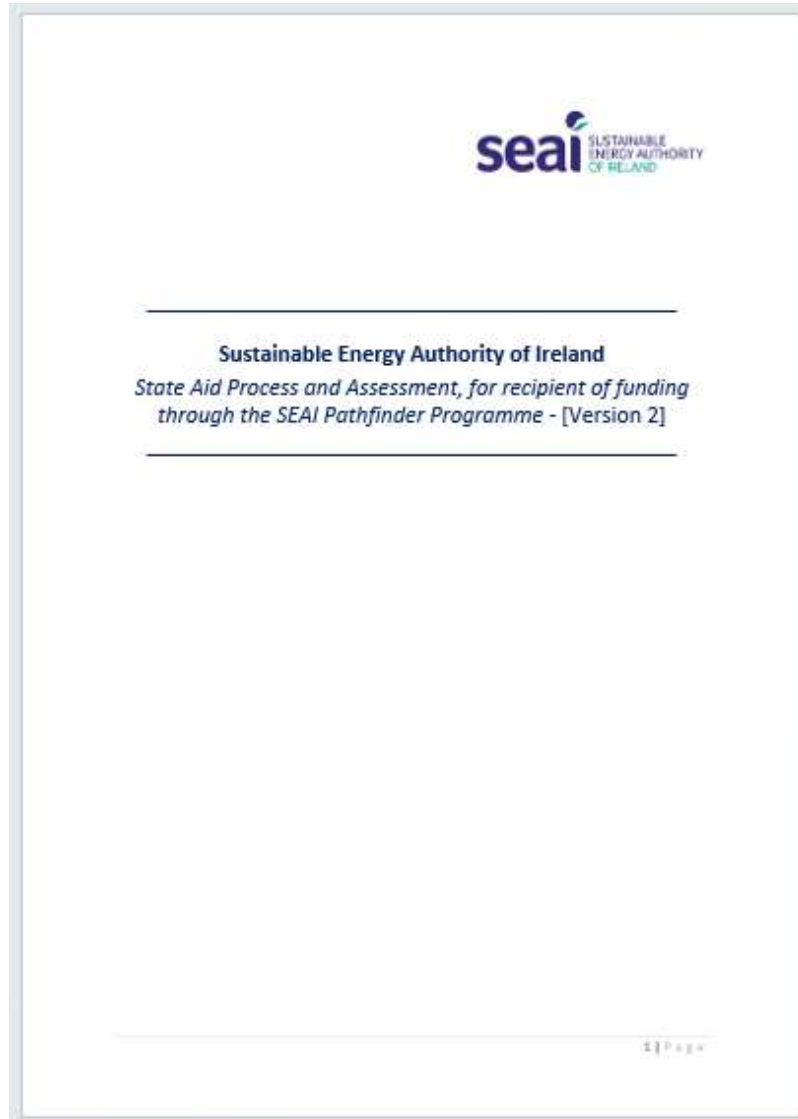
- Typically provides 50% match funding for eligible expenditure of a project
- It is applied for through a programme level approval process.

Pathfinder Process Flow - SEAI / Partners





Pathfinder – State Aid assessment





Pathfinder – Project Selection Matrix

Project Information										
Local Authority/ Organisation/ State Body	Project / Building Name	Building Description	Eircode	Year of Original Construction	Heritage or Protected Structure	Owned or Leased	Gap to Target Analysis Complete	Heating fuel (existing)	Total Useful Floor Area (m2)	Procurement/ Delivery Route
Dublin City Council	XX Library	Library	A11 A111	2005	No	Owned	Yes	natural gas	2,500	EPC

Energy Audit Complete	Energy Audit/ Design Reference Document	Report Date	AG1 - Notional Budget (Pre Design)		Energy Use/Year - AG1/AG3-Baseline				
			Notional Total Budget (excl VAT)	Notional Budget €/Sq.m (excl VAT)	Electricity Usage - (kWh)	Fossil Fuel Usage (kWh)	Biomass Estimated Usage (kWh)	Total Energy Use - (kWh)	Total Energy Use - kWh/Sq.m
Yes	Codema	01.01.2026	€1,500,000	€ 600.00	500,000	1,500,000	-	2,000,000	800

Energy Use/Year - AG1/AG3 Post Works (Post Tender)					AG1/AG3 Energy Savings (kWh)					
Electricity Estimated Usage (kWh)	Fossil Fuel Estimated Usage (kWh)	Biomass Estimated Usage (kWh)	Total Energy Estimated Use - (kWh)	Total Estimated Energy Use - (kWh)/Sq.m	Electricity Usage Savings (kWh)	Fossil Fuel Savings (kWh)	Biomass Savings (kWh)	Total Energy Savings - (kWh)	Total Energy Savings - %	€/kWh Saving
600,000	150,000	-	750,000	300	100,000	1,350,000	-	1,250,000	63%	€ 1.20

Operational Energy Cost Savings (€/yr)							Carbon Summary				Payback
AG1 Pre Works Operational Cost	Electricity Rate - €/kWh	Electricity Savings (€)	Fossil Fuel Rate - €/kWh	Fossil Fuel Savings (€)	AG3 - Total Operational Energy Savings - (€)	AG3 - Total Operational Energy Savings - %	Baseline Total CO2 (tonne)	Total CO2 Saving (tonne)	Total CO2 Saving %	€/tonne CO2 Saving	Payback Years (total savings)
€ 295,000.00	€ 0.29	€ 29,000.00	€ 0.10	€ 135,000.00	€ 106,000.00	36%	433.4	249.9	58%	€ 6,001.92	14



Pathfinder – Preliminary Business Case



Preliminary Business Case
Pathfinder Programme
South Dublin County Council
Contract 2025

Approval Gate 1 (AG1)

Revision History

Revision	Document Owner	Description
00	GMN	Initial Draft of
01	GMN	Final Draft for
02	GMN	Final Draft fo
03	GNM	Incorporate

Contents

1 Introduction

- 1.1 Background
- 1.2 Purpose
- 1.3 Governance

2 Meeting the Principles of the SEAI Pathfinder Programme

- 2.1 Step 1 – Essential and Secondary Criteria
- 2.2 Step 2 – Detailed Assessment of Each Project
- 2.3 Step 3 – Programme Level Summary
 - 2.3.1 Strategic Relevance of Proposed Project and Detailed Specification of Objectives
 - 2.3.2 Description of Short-List of Options to Deliver Project
 - 2.3.3 Detailed Demand Analysis
 - 2.3.4 Options Appraisal (Including Financial, Economic, Sensitivity)
 - 2.3.5 Assessment of Climate and Environmental Performance
 - 2.3.6 Affordability Assessment from Existing Resources
 - 2.3.7 Risk Assessment (Including Optimism Bias, Risk, Management Strategy etc.)
 - 2.3.8 Proposed Approach to Implementation and Operation
 - 2.3.9 Proposed Procurement Approach
 - 2.3.10 Assessment of Delivery Risk
 - 2.3.11 Monitoring and Evaluation Plan and Key Performance Indicators
 - 2.3.12 Recommendations to Approving Authority
- 3 Appendices
 - 3.1 Appendix A – Essential and Secondary Criteria
 - 3.2 Appendix B – Detailed Assessment of Each Building/Project

Include the use of fossil fuels only if at least one of the following is true:

- The fossil fuel use is through the use of electricity from the grid.
- There is no technically viable non-fossil alternative (generally only related to applications for a purpose other than space heating)
- Where the installation of a renewable space heating system would increase the final energy consumption or CO2 emissions.
- The fossil fuel use is provided for backup, peaking, or operational purposes (and less than 10% of annual heating energy)
- The fossil fuel is part of a credible phased pathway to net zero emissions (e.g. to allow the building to be connected to a planned district heating system)



Pathfinder – Project Selection Report



Project Selection Report

Pathfinder Programme

Dublin Local Authorities EEDPP 2025
Approval Gate 1 (AG1) Review

Contents

1 Introduction

1.1 Background

1.2 Purpose & Scope of Report

1.3 Steering Group

2 Project Selection Process

2.1 The Approach / Assessment Criteria

2.1.1 Essential Criteria

2.1.2 Secondary Criteria

2.2 Assessment process

2.3 Results

2.3.1 List of Approved Projects

2.3.2 Reserve Projects

2.4 Recommendation



How are projects developed?

Project Stage	Deliverable/Activity	DeliveRE E PIU (Facilitator)	LA/Client	SEAI	Pathfinder Steering Group	ESCo	Client Legal representative	Client EED/Technical Advisor representative	Client Cost Control representative
Procurement/Tender Action/Preliminary Design	Prequalification Questionnaire	Lead	Support			Submission			
	Technical File	Lead	Support						
	Draft Client Requirements or Works specification	Lead	Support						
	Invitation to Participate in Competitive Dialogue	Lead	Support						
	Technical Advisory and QS Team Procurement	Support	Lead						
	Outline Solutions Report/Concept design	Review	Review			Submission		Review	Support
	Challenge and Analyse (CD meetings)	Support	Support					Lead	Support
	Invitation to tender	Lead	Support			Submission		Support	Support
	Tender Evaluation	Lead	Support						
	Value for Money assessment report	Support	Support	Informed				Support	Lead
	Contract Award	Lead	Support	Informed					
	Tender Evaluation Report	Lead	Support						
Contract legal review and signing	Support	Oversight/Approval	Informed				Lead		
Post Procurement/ Pathfinder payment drawdown (1st payment)	Final Business Case		Lead	Oversight	Approval				
	Project Selection Report (AG3)		Lead	Oversight	Approval				
	Funding Drawdown Request (First Payment)		Lead	Approval	Oversight				
DeliveREE Project Final Milestone		DeliveREE Project Final Milestone							



Procurement – Prequalification Questionnaire

For both a single project OR establishing a Framework, a Prequalification Questionnaire will be published on eTenders

Tenderers meeting the following criteria will proceed to Competitive Dialogue

A – PASS/FAIL

- Turnover
- Insurances
- Tax Compliance
- Article 57 Declaration
- Health and Safety Competence
- Data Protection Agreement

B – Previous experience, Capacity, and Quality Assurance (MINIMUM MARKS REQUIRED)

- Previous contracts and experience
- Organisational capacity
- Project Management and Quality control



Procurement – ITPCD

Tenderers issued a document pack containing

- Invitation to Participate in Competitive Dialogue (the “rules” for Competitive Dialogue)
- Draft Client Requirements (the outcomes the Client wants)
- Site Visit Protocol
- Technical File (per building)



- All Site Visits must be:**
- Pre-arranged, organised and co-ordinated by KCC.
 - Site Visit will be attended by an employee from KCC or nominated person by KCC.
 - Pre-selected Applicant Representatives (maximum 4) may also be attendance.
- Tour of Site**
- Only the facility specified in the Invitation to Participate in Dialogue document may be viewed.
 - Applicants must wear the following Personal Protective Equipment (PPE) on site: High Visibility Clothing and Safety Footwear.
 - Under no circumstances can the offer and conditions of a competitor applicant for the tender be discussed.
 - A list of name(s) of the applicants employees and representatives (maximum 4) seeking a site visit who will be in attendance will be provided in advance. There shall be no deviation from the number of applicant representatives in attendance. (Any change of personnel must be notified to KCC in advance). There will be a signing in procedure.
 - All applicants employees and representatives must adhere to any KCC COVID-19 protocols.
 - Disruption to the daily working of the Contractor on Site should be kept to a minimum.
 - Extra care should be taken if it is necessary to visit area that in anyway might infringe on its day-to-day operations.
 - Site Visits must take the exact same formula / routine on each occasion.
 - If an applicant is late (over 30 minutes) for its scheduled visit (without making contact with KCC, it will be cancelled and may only be re-scheduled at the discretion of KCC (24 hour notice required).
 - No further information will be provided at the site visit, prospective applicants may only ask questions in writing following the site visit seeking additional information and clarifications through Codema. The closing date for receipt of queries is the 28th June 4pm.
 - In general there will be only one visit to each site by each applicant. However in certain circumstances additional visits may be arranged and facilitated at the discretion of KCC.
 - No publicity regarding this public procurement competition, the award of a contract or the execution of the contract is permitted unless and until the Contracting Authority has given its prior written consent to the relevant communication.



Procurement – Outline Solutions Report


Contents of the Technical File


- Consumption data (bills/ logged data)
- Floor plans
- Electrical & Mechanical plans
- Energy data (BER, DEC,...)
- Previous Audits & Surveys
- Past works/measures
- Photos of equipment
- CHP data (service history, run hours)
- Maintenance records


Outline Solutions Report


- Prepared by tenderers - details the technical solutions proposed to meet the Client Requirements
- The first version of the Outline Solutions Report is submitted for review before the first Competitive Dialogue meeting

This report is the starting point for Competitive Dialogue

 01. Reports & Information

 02. Bills & Consumption

 03. DEC's

 04. Drawings & Photos



Procurement procedures

The Directive sets out 6 Procurement Procedures:

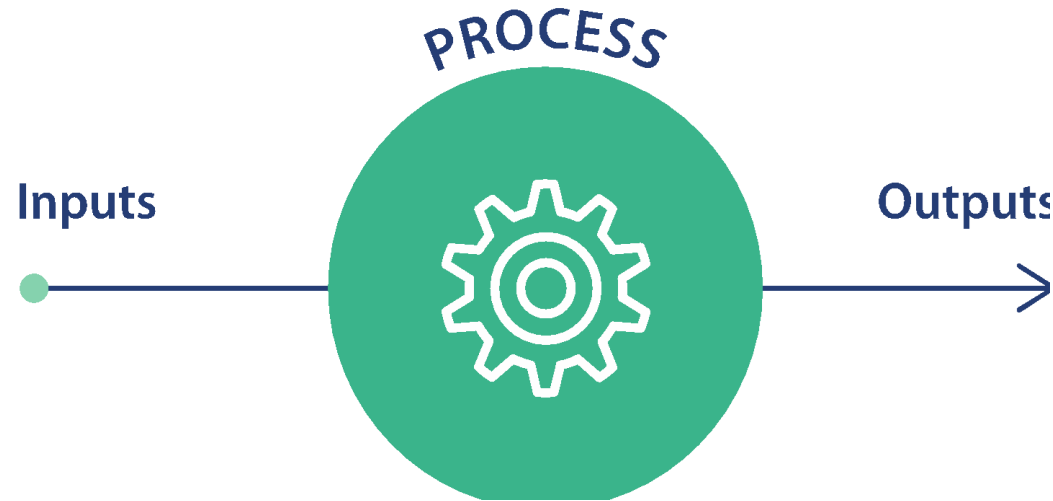
- 1. Open procedure (1 stage)**
2. Restricted procedure (2 stage)
3. Competitive procedure with negotiation
- 4. Competitive dialogue**
5. Innovation Partnership
6. Use of the negotiated procedure without prior publication



Buy the outputs not the inputs

Inputs:

- PV Panels
- LED Lighting
- Gas Boilers
- Biomass Boilers
- CHP
- BMS
- AHU
- Insulation
- Windows
- Heat Pumps
- Fuel Cells
-



Outputs:

- Low carbon
- Comfortable
- Safe
- Cost efficient
- Energy efficient

**Payment
&
Profit**



Procurement

What are we buying/procuring?

- **The Contract** (Guaranteed Energy Savings – the Output)

How do we procure this contract?

- **Competitive Dialogue**



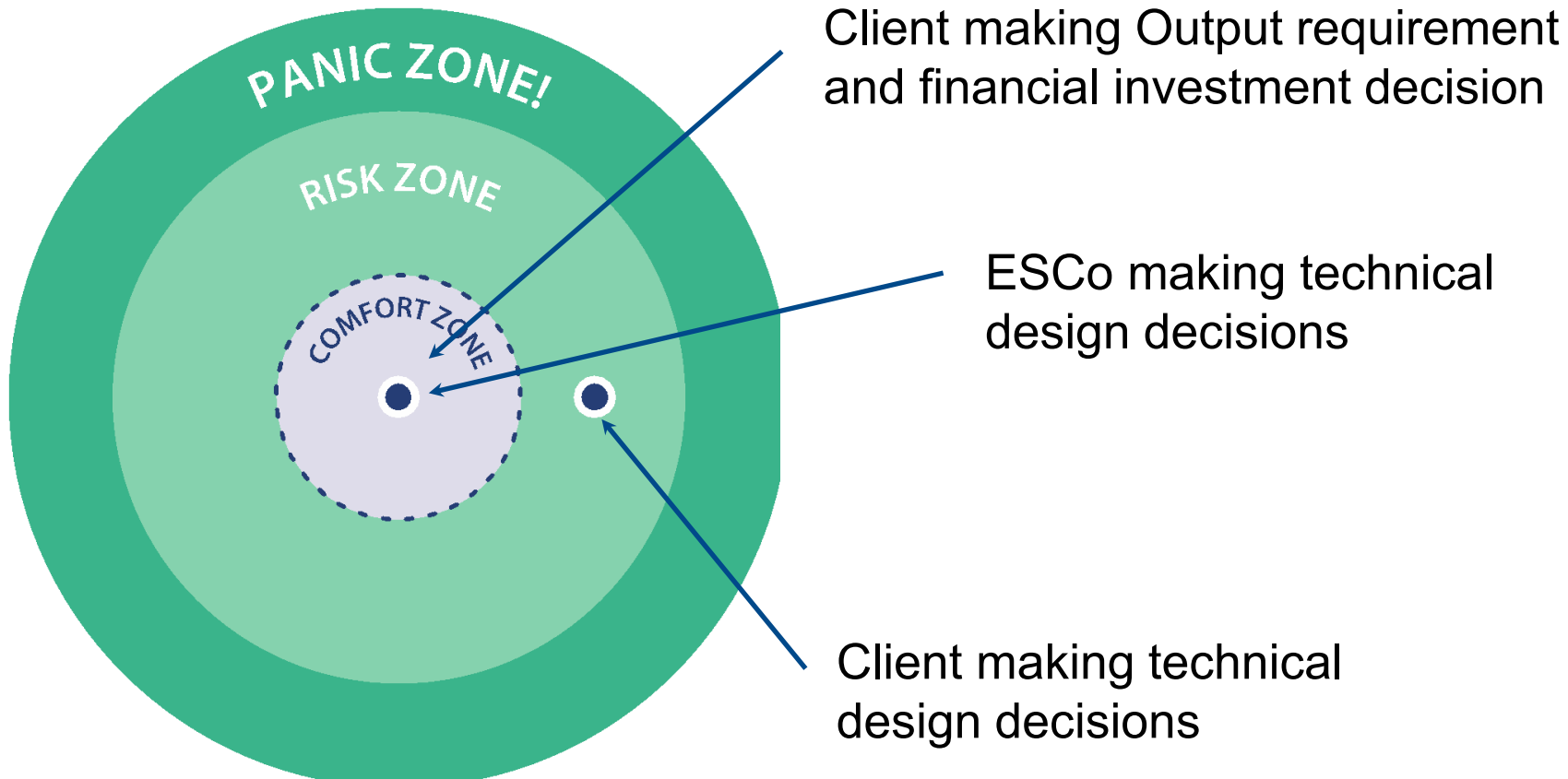
Competitive dialogue for EPC

Why use Competitive Dialogue?

Output Specification

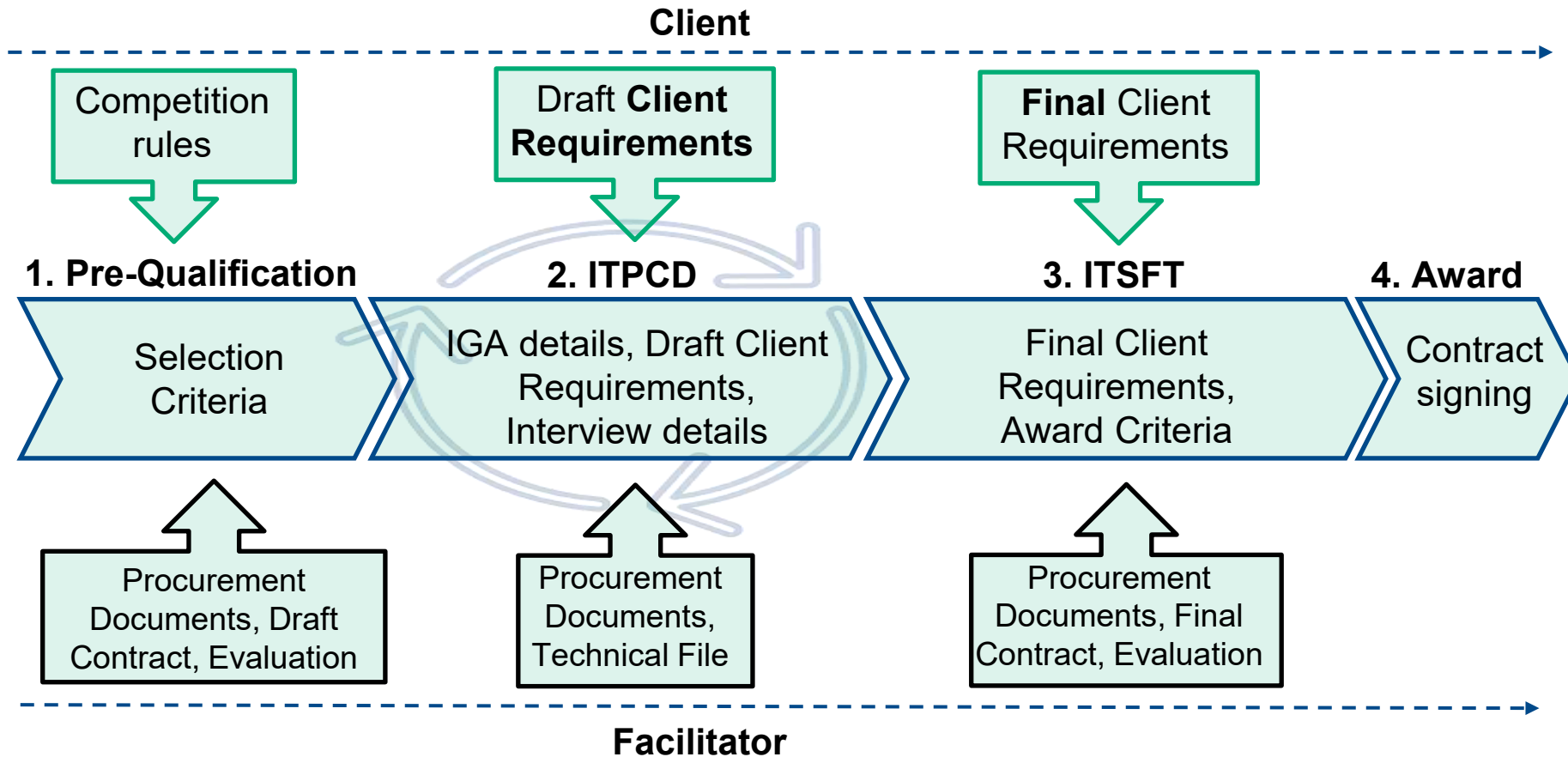


Competitive dialogue for EPC





Competitive dialogue procedure





Invitation to participate in competitive dialogue

Dialogue Phase

- Interview format
- ESCo presents solutions
- Set a clear agenda
- Equal treatment
- Client, procurement & technical representatives
- Goal – to finalize the Client Requirements





Competitive Dialogue – Output Specification/Client Requirements

Appendix A - Client Requirements¹

1. There is one (1) Energy Performance Contract in respect of the two [client] public buildings located at:
 - [Building 1 name]
 - [Building 2 name]

the locations of which are identified in Schedule 7 of the Form of Contract – see Appendix B.
2. The relevant energy consumption baseline year is 2019 as set out in Appendix E under the Baseline data and independent variables.⁷
3. Only **one (1) solution** may be tendered. This must be set out in the table presented in Schedule 1 of the Form of Contract (see Appendix B). **This table must not be altered in anyway.**
4. **Do not** include for **potential grants** or any other such payments in your tender.
5. No claims for corrective maintenance of existing equipment will be considered during the first **two years of the services period** (except in case of emergency). Tenderers in their respective tender offer should include for any corrective maintenance of the equipment listed on the asset register that in their professional opinion is likely to occur within this time frame.
6. [client] will contribute up to a maximum of **€500,000** towards the overall capital expenditure.
7. [client] will contribute a **monthly payment of €1,000** towards the ongoing maintenance costs as set out in Clause 17 of the Form of Contract over its duration. This will be in addition to the monthly payments as calculated in accordance with Clause 21.
8. The guarantee period (contract duration) is fixed at **8 years**.
9. The minimum overall energy savings target for the three buildings combined is **30%** of Total Energy Cost calculated at the Unit Price according to the calculation method set out in Schedule 1 of the Form of Contract and according to the baseline as set out in Appendix E.

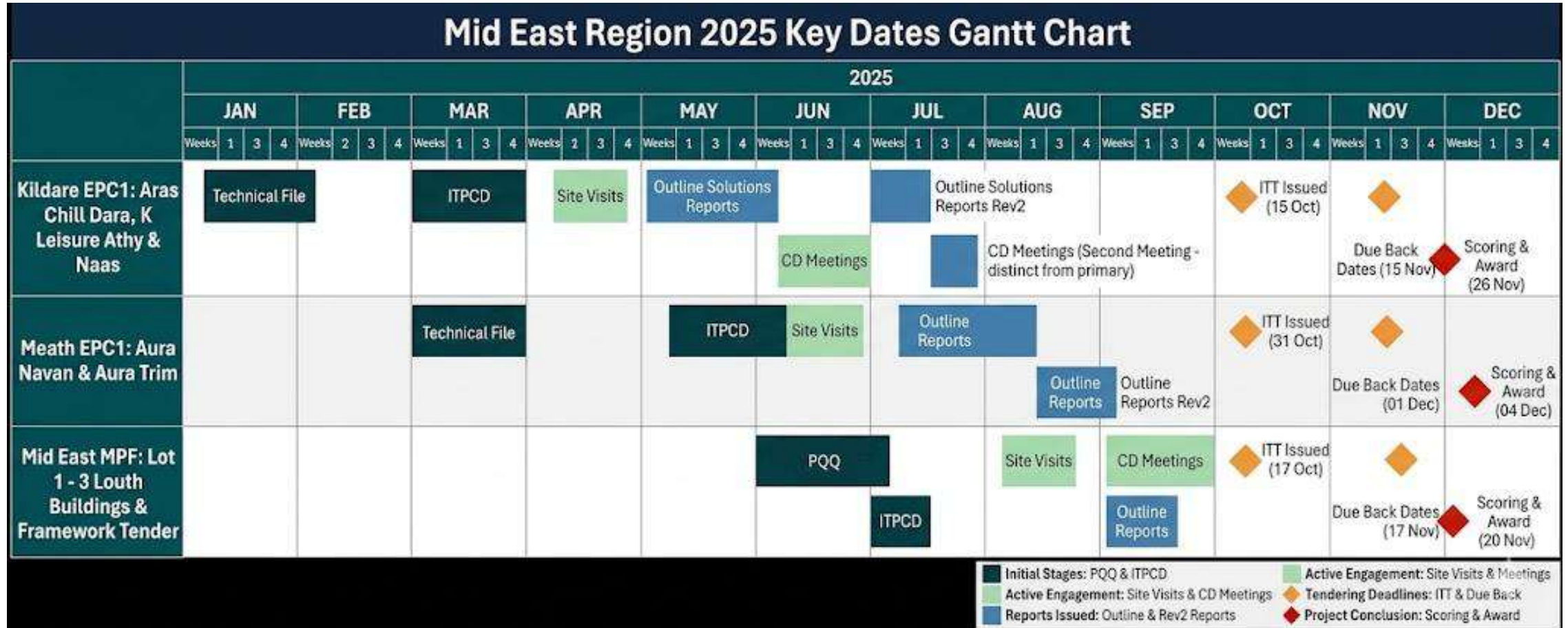
Please note this is a **Pass/Fail criteria**. Tenderers must supply complete evidence of all **calculations, methodologies and assumptions** used in the calculation of energy savings for this project. This information will be used to assess the overall accuracy and credibility of the proposed savings.
10. The **utility costs** for the project will be fixed as follows:
 - Electricity: Day: €0.17 per kWh
Night: €0.080 per kWh
 - Gas: €0.040 per kWh
11. The performance of the energy conservation measures will be verified by a Measurement and Verification Plan. This plan must be prepared by the service provider in compliance with the **International Performance Measurement and Verification Protocol (IPMVP)**. In addition, the plan must be prepared by a **Certified Measurement and Verification Professional (CMVP)**.
12. The **technical boundary of the project** is as defined in the asset register outlined in Appendix F.

Client Requirements

1. LA will contribute up to a **maximum of €XXX** towards the overall capital expenditure
2. The **minimum overall energy savings target is XX%** of Total Energy Cost calculated according to Schedule 1
3. The guarantee period (contract duration) is **fixed at 8 years**
4. No fossil fuel systems considered.....
5. The indoor air temp and humidity must be.....



Evidence from Delivery – Project Development Time





Project Scope

CODEMA engaged KOSMOS to deliver a Value for Money Assessment comparing traditional CWMF contracts against Energy Performance Contracts (EPC), plus expert opinion on cost ceilings.





Core Question

Does EPC represent good value for money?



Five Key Questions

- What are the alternatives to EPC?
- How does EPC financially compare?
- Environmental comparison?
- Strategic alignment with goals?
- Conclusions?



Strategic Alignment with Client Goals

Primary

Move from low-CAPEX to high-efficiency equipment

Shift from traditional replacement of aging equipment with cheapest solution to high-energy efficiency equipment. Movement from CAPEX focus to OPEX focus.

✓ EPC is the most appropriate contract choice for this goal

Secondary

CO2e reduction aligned with NetZero targets

Replacement and renovation works should lower CO2e and align with broader goals towards achieving NetZero for Client's built assets.

✓ EPC pushes contractors hardest towards optimal solutions

Tertiary

Cost effectiveness across full picture

CAPEX change + OPEX change + Cost of Carbon savings. Value for money even when paying a premium for high-energy efficiency.

✓ EPC is equal or better than alternatives on all comparison points



Conclusion

EPC is the recommended contract model for this client

The Energy Performance Contract (EPC) model is the most appropriate and effective choice for client's energy efficiency and value-for-money objectives. It offers robust guarantees, aligns incentives, and supports strategic goals better than traditional alternatives.

Value for Money

EPC is roughly equal to alternatives from CAPEX perspective. Contractor financing offsets higher risk allowances.

Risk Premium Trajectory

Risk premiums expected to decrease over time as market experience grows and dialogue continues.

Best Strategic Fit

EPC meets the client's strategic goals best. Not wasteful or excessive in achieving energy efficiency objectives.



How are projects developed?

Project Stage	Deliverable/Activity	DeliveRE E PIU (Facilitator)	LA/Client	SEAI	Pathfinder Steering Group	ESCO	Client Legal representative	Client EED/Technical Advisor representative	Client Cost Control representative
DeliveREE Project Final Milestone		DeliveREE Project Final Milestone							
Developed Design	Refine M&V Plan	Oversight	Oversight/Approval			Lead			
	Developed Design Report/ Upload to database for Client review	Support	Oversight/Approval			Lead		Oversight	Support
	Challenge and Analyse (1)	Support	Support			Respond		Lead	Support
	Planning application	Support	Lead			Respond			
Detailed design	Detailed Design Report	Support	Oversight/Approval			Lead		Support	Support
	Challenge and Analyse (2)	Support				Support		Lead	Support
	Works Planning/ Scedule of Works	Support	Oversight/Approval			Lead			
	EPC Detailed Design and Cost Evaluation Report	Support	Oversight						Lead
Pre-Works	Pre Works BER Assessment	Support				Lead			
	Post Occupancy Evaluation Plan	Support				Lead		Review	
	Commissioning plan	Support				Lead		Review	
	Project Execution Plan (Final)	Support	Lead			Support		Support	
Works	Site Inspection Reports	Support	Approval			Oversight		Lead	
	Quarterly Approved Project Programme Report	Support	Approval			Lead		Review	
	Commissioning Report	Support	Approval			Lead		Approval	
Works Completion	EED Project Summary Report	Support	Approval					Lead	
	Post Works BER Assessment	Support	Approval			Lead			
	Certificate of Substantial Completion (Handover)	Support	Approve			Lead		Approval	Oversight
	Funding Drawdown Request (Final Payment)	Support	Lead	Approval	Approval				
Service and Operation Stage	Measurement and Verification Report	Oversight	Approval			Lead		Approval	
	Post Occupancy Evaluation and Monitoring	Oversight	Approval			Lead		Approval	
	Project Completion Report	Oversight	Approval			Lead		Approval	
	Services period/ Defects Certificate	Oversight	Approval			Lead		Approval	



Presenting Projects to the Market

- We **assumed we could repeat** what we had done before – **first competition** tendered under DeliveREE **collapsed**, why?
- Shift in focus from Energy Efficiency to **Decarbonization means:**
 - Higher project **capital cost** (heat pumps)
 - Higher project **risk** (technical and financial)
 - This results in a higher **bid cost** for the ESCo (design costs)
 - ESCOs **not willing** to take on this cost risk



New procurement strategy (to reduce ESCo bid cost)

1. **Pre-Qualification** (short list to 3)
2. **Invitation to Competitive Dialogue** – the 3 shortlisted contractors - Outline Solutions Report.
3. **Invitation to Tender** - Based on the outcome of the dialogue phase:
 - the client issues their final set of output requirements for the project
 - the contractors bid based on their audit and proposed solutions.
 - No detailed design has been completed at this stage – Preliminary Design
4. **Selection of Preferred Bidder**
5. **Contract Award**
 - Contract has three phased:
 1. Detailed design (PDA)
 2. Works
 3. Services
 - final costs cannot be greater than the tendered costs
 - Costs expected to reduce as risk margin is designed out
 - Open book design process reviewed by client QS and Technical Advisor.
 - Contract can end at the end of the design phase



Slido Link



Link: <https://www.slido.com/>

Code: 3861771



Question and Answer Session

- Questions ?

Thank You

**Joe Hayden &
Grainne MacNamara**



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