Call: HORIZON-EIC-2023-ICAPITAL-PRIZE-02 (The European Capital of Innovation Awards (iCapital)) Topic: HORIZON-EIC-2023-ICAPITAL-PRIZE-02-2 Type of Action: HORIZON-RPr

Proposal number: 101145688 Proposal acronym: Icapital Type of Model Grant Agreement: HORIZON Prize

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Section	Title	Action
1	General information	
2	Participating organisations & contacts	

Proposal ID 101145688

Acronym Icapital

1 - General information

Field(s) marked * are mandatory to fill.

Торіс	HORIZON-EIC-2023-ICAPITAL-PRIZE-02-2	Type of Action HORIZON-RPr		
Call	HORIZON-EIC-2023-ICAPITAL-PRIZE-02	Type of Model Grant Agreement HORIZON-PR		
Acronym	Icapital			
Proposal title	Rising Innovative City 2023 - Cork City Application			
	Note that for technical reasons, the following characters are not ac	septed in the Proposal Title and will be removed: < > " &		
Free keywords	Innovation, Climate Action, Digitization, Research, Ac	ademia, Public, Industry.		

Abstract

Cork City is Ireland's second largest city home to a population of 222,333 people (2022). Cork City is Ireland's second largest economic engine and an emerging national counterbalance to Dublin, offering a diverse economic base with strong concentrations of activity present in ICT, Life Sciences, International Traded Services, Business Services, Education, Health, Retail, Cybersecurity and Nanotechnology. The wider city region also plays host to an internationally significant pharma and bio-pharma sector plus strong energy, maritime and agri-food clusters. As well as being the main service centre for the Southern Region, Cork is home to significant national level health, educational and cultural institutions

Cork City Council is the local governing body responsible for delivering a broad range of services in relation to roads; traffic; planning; housing; economic and community development; environment, recreation and amenity services; fire services and maintaining the register of electors. Cork City Council is managed and governed by two separate but inter linked arms; the Executive and the Elected Members. The Executive are responsible for the delivery of the above mentioned services while the Elected Members (Councillors) of which there are 31 and chaired by the Lord Mayor have reserved functions including making the council budget and City Development

Plan.

Cork City's Rising Innovative City 2023 application seeks to show the breadth of Cork City's innovative eco-system. An eco-system which links the citizens, the public sector, academia and industry together to solve key issues and create a better quality of life for it's citizens.

Remaining characters

324

Has this proposal (or a very similar one) been submitted in the past 2 years in response to a call for proposals under any EU programme, including the current call?

💿 Yes 🔘 No

Please give the proposal reference or contract number.

101102138

Аррисацоптопп	
Proposal ID 101145688 Acronym Icapital	
Declarations Field(s) marked * are many	datory to fill.
1) We declare to have the explicit consent of all applicants on their participation and on the content of this proposal. *	\boxtimes
2) We confirm that the information contained in this proposal is correct and complete and that none of the project activities have started before the proposal was submitted (unless explicitly authorised in the call conditions).	\boxtimes
 3) We declare: to be fully compliant with the eligibility criteria set out in the call not to be subject to any exclusion grounds under the <u>EU Financial Regulation 2018/1046</u> to have the financial and operational capacity to carry out the proposed project. 	\boxtimes
4) We acknowledge that all communication will be made through the Funding & Tenders Portal electronic exchange system and that access and use of this system is subject to the <u>Funding & Tenders Portal Terms</u> and <u>Conditions</u> .	\boxtimes
5) We have read, understood and accepted the <u>Funding & Tenders Portal Terms & Conditions</u> and <u>Privacy Statement</u> that set out the conditions of use of the Portal and the scope, purposes, retention periods, etc. for the processing of personal data of all data subjects whose data we communicate for the purpose of the application,	\boxtimes

audits). The coordinator is only responsible for the information relating to their own organisation. Each applicant remains responsible for the information declared for their organisation. If the proposal is retained for EU funding, they will all be required to sign a declaration of honour.

evaluation, award and subsequent management of our grant, prizes and contracts (including financial transactions and

False statements or incorrect information may lead to administrative sanctions under the EU Financial Regulation.

Proposal ID 101145688 Acronym Icapital

2 - Participants

List of participating organisations

#	Participating Organisation Legal Name	Country	Role	Action
1	CORK CITY COUNCIL	Ireland	Coordinator	

Proposal ID101145688AcronymIcapitalShort nameCORK CITY COUNCIL

Organisation data

PIC	Legal name
986290763	CORK CITY COUNCIL
Short name: CO	RK CITY COUNCIL
Address	
01	

Street CITY HALL Town CORK Postcode T12 T997 Country Ireland Webpage www.corkcity.ie

Specific Legal Statuses

Legal person	yes
Public body	yes
Non-profit	yes
International organisation	no
Secondary or Higher education establishment	no
Research organisation	no

SME Data

Based on the below details from the Participant Registry the organisation is not an SME (small- and medium-sized enterprise) for the call.

SME self-declared status	01/01/1900 - no
SME self-assessment	unknown
SME validation sme	unknown

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Proposal ID101145688AcronymIcapitalShort nameCORK CITY COUNCIL

Departments carrying out the proposed work

Department 1

Department name	Strategic & Economic Development	not applicable	
	Same as proposing organisation's address		
Street	City Hall, Anglesea Street, Cork City		
Town	Cork City		
Postcode	Т12 Т997		
Country	Ireland		

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Proposal ID 101145688 Acronym Icapital

Short name CORK CITY COUNCIL

Main contact person

The name and e-mail of contact persons are read-only in the administrative form, only additional details can be edited here. To give access rights and basic contact details of contact persons, please go back to step - Manage your related parties of the submission wizard and save the changes.

Title	Mr	Gender	⊖Woman	 Man 	○ Non Binary
First name	Sean	Last nan	ne Lotty		
E-Mail	sean_lotty@corkcity.ie				
Position in org.	Enterprise Executive				
Department	Strategic & Economic Development				Same as organisation name
	Same as proposing organisation's address				
Street	City Hall, Anglesea Street, Cork City				
Town	Cork City	Post code	T12 T997		
Country	Ireland				
Website	www.corkcity.ie				
Phone	(021) 496 1828 Phone 2 + XXX XXXXXXXX				

Other contact persons

First Name	Last Name	E-mail	Phone
Claire	Davis	claire_davis@corkcity.ie	+XXX XXXXXXXXXX
Niall	O'Keeffe	niall_okeeffe@corkcity.ie	+XXX XXXXXXXXXX
Seamus	Coghlan	seamus_coghlan@corkcity.ie	+XXX XXXXXXXXXX
Ronan	Gingles	ronan_gingles@corkcity.ie	+XXX XXXXXXXXX

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Horizon Europe

Application Form

Technical Description (Part B)

The European Capital of Innovation Awards 2023

Version 1.0 08 March 2023

IMPORTANT NOTICE

What is the application form?

The application form is the template for EU prize applications. It must be submitted via the EU Funding & Tenders Portal before the call deadline.

The form consists of 2 parts:

- Part A contains structured administrative information
- Part B is a narrative technical description of the application.

Part A is generated by the IT system. It is based on the information which you enter into the Portal Submission System screens.

Part B needs to be uploaded as PDF (+ annex) in the Submission System. The templates to use are available there.

How to prepare and submit it?

The application form must be prepared by the city and submitted by a representative. Once submitted, you will receive a confirmation.

Character and page limits:

- page limit: 30 pages.
- Annex: the only mandatory annex required is the city Mayor's (or the equivalent highest political representative) endorsement. This document should be uploaded in the system separately from Part B. (max 2 pages)
- Minimum font size Arial 9 points
- page size: A4
- margins (top, bottom, left and right): at least 15 mm (not including headers & footers).

Please abide by the formatting rules. They are not a target! Keep your text as concise as possible. Do not use hyperlinks to show information that is an essential part of your project.

1 If you attempt to upload an application that exceeds the specified limit, you will receive an automatic warning asking you to shorten and re-upload your application. After you have submitted it, any excess pages will be made invisible and thus disregarded by the evaluators.

- Please do NOT delete any instructions in the document. The overall page-limit has been raised to ensure equal treatment of all applicants.
- Please do NOT modify this template. You must use it without altering its format (i.e., Do not include the logo of your city in the header nor as a footnote).
- Before submitting your application, please ensure that the correct prize category is selected.

APPLICATION FORM (PART B)

COVER PAGE

Part B of the Application Form must be downloaded from the Portal Submission System, completed, and then assembled and re-uploaded as PDF in the system.

Note: Please take due account of the call conditions published on the Portal. Pay particular attention to the award criteria; they explain how the application will be evaluated.

PROJECT ¹		
Project name:	[HORIZON-EIC-2023-ICAPITAL-PRIZE-02]	
Project acronym:	[ICapital]	
Coordinator contact:	[Sean Lotty], [Cork City Council]	
Prize category:	[European Rising Innovative City]	
City population (include reference year)	222,333 (2022)	

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1. SUMMARY

Application summary

See Proposal Abstract (Part A).

¹ For ease of reference and consistency on the Funding & Tenders Portal, the terms 'call', 'project', 'proposal', 'coordinator' or 'beneficiary' (or other project-related acronyms like COO or BEN) are used as equivalent to 'contest', 'application' or 'contestants/applicants'.

2. DETAILED DESCRIPTION

Detailed description of the application

The texts should provide a clear overview of your city's excellence in relation to the objectives of the prize. Describe the application in detail, specifically addressing each of the award criteria set out in the Rules of Contest (see also below) Please, bear in mind there is no character limitation per box (criterion) but remember the overall limit of 30 pages. Please follow the instructions indicated above.

Award criterion 1, Experimenting – innovative concepts, processes, tools, and governance models proving the city's commitment to act as a test-bed for innovative practices, while ensuring the mainstreaming of these practices into the ordinary urban development process. In this criterion, among others, the applicant should consider answering these questions: Why are these initiatives and/or concepts perceived as new? In which sense are they different to others? What was the city's role in these innovative concepts and/or models? What impact did they have in the city and ecosystem' stakeholders?

INTRODUCTION: CORK'S CLIMATE MISSION

Cork is Ireland's second-largest and fastest-growing city. Cork City Council aims to provide an attractive, high-quality, resilient place in which to live, work, visit and do business.

Cork City Council works under the strategic direction of a National Framework (2040) and a regional strategy along with the recently launched City Development plan 2022-2028. Our aim is to implement those strategies in a systematic manner, experimenting and trialing best practice and innovative models. Cork City Council is fully committed to the scaling and widespread rollout of initiatives and concepts which prove successful.

Cork City Council recognises that undertaking extensive climate action must now be treated as the number one priority if those climate goals are to be fulfilled. Prioritisation of climate action will improve the quality of life for residents of the city and ensure that Cork City Council can play a role in addressing the most pressing global challenge of our time.

100 CLIMATE NEUTRAL AND SMART CITIES MISSION

In April 2022, Cork City was selected to take part in the EU's 'Cities Mission' initiative, becoming one of Europe's 100 Climate Neutral and Smart Cities. This initiative aims to significantly accelerate the delivery of the European Green Deal's goal of becoming a 'net zero' continent by 2050.

Cork's participation, led by Cork City Council but drawing together a city-wide coalition of stakeholders, including academia, industry, community groups and citizens, will be framed by devising and delivering a new model of local multi-level governance, the 'Climate City Contract' due to be finalized in 2024. The Climate City Contract will comprise of an Action Plan and associated investment strategy which will facilitate and future-proof Cork's growth as a inclusive, sustainable, compact, healthy, liveable and attractive city – all co-benefits of consolidated climate action.

In placing Cork towards the forefront of Europe's most sustainably minded cities, the Mission will open up further valuable opportunities over the coming years. These will provide specific peer-to-peer connections and collaborations with other cities around issues of shared concern. As a Mission City, Cork will serve as a testbed for piloting specific new approaches and innovations to help us achieve our climate ambitions. This will in turn allow Cork to serve as an exemplar for other cities, across Ireland and Europe, to follow.

In laying the groundwork towards the development of the Contract, work to date has centred on a combination of:

- Developing a baseline analysis of Cork's current emissions across the key emission domains of Housing, Industry, Public Services, Road transport, Commercial, Agriculture and Waste Handling and Treatment.
- Consolidating joint priority interests with local, national, and international stakeholders
- Preparing a climate risk assessment study.
- commissioning a large-scale household survey of attitudes and behaviors.
- Cork City Council organised a set of sectoral 'Cork Climate Conversations' to structure engagement with other public sector organisations, the business sector and community

representatives (through the Public Participation Network). These events were developed in conjunction with University College Cork's Civic Engagement Unit

- Engaged with schools and younger generations to ensure their voice is heard.
- Launch of a €840,000 Community Climate Action Fund.

Mission to 'Restore our Ocean and Waters

 In November 2022, Cork became the first Atlantic City to sign the Charter of the Mission to 'Restore our Ocean and Waters'. In doing so Cork City Council pledges to play a meaningful local leadership role in this area. To support these efforts, a 10-point local Action Programme has been devised by which to embrace our natural water resources. This plan encompasses a series of commitments to deliver locally through a series of plans and pilot actions on Green and Blue Infrastructure (nature-based solutions); on safeguarding biodiversity; and on water quality and pollution, including through citizen science.

Key deliverables include:

- Sensitive waterfront heritage conservation.
- The relocation of the port facility will create the regeneration space allowing Cork to grow as a more compact city.
- Lee-to-Sea Greenway as a world-class walking, running, and cycling route amenity running through the city and along its harbour to the ocean.
- In addition to the work to develop the Climate Contract as part of the Cities Mission Programme, Cork City Council has engaged in supporting activities which will help accelerate Cork City's Climate Neutral Ambition

Cork City's Air Quality Strategy

In August 2021 Cork City Council was the first local authority in Ireland to launch an Air Quality Strategy. This was a co-created strategy which was developed by Cork City Council in collaboration with residents, community groups, the Electricity Supply Board (ESB), University College Cork (UCC), the Environmental Protection Agency (EPA), Munster Technological University (MTU) and Healthy Cities, amongst other groups to develop and implement the strategy. The Air Quality Strategy sets out short, medium, and long-term initiatives to improve air quality in Cork City including proposing:

- A 'last mile Electric Vehicle Delivery' service for HGV (heavy goods vehicles) in the city.
- The creation of Low Emission Zones /Clean Air Zones
- The increase of tree cover in the city includes the development and enhancement of ecological corridors, the securing of wetland areas, the increasing the number of pocket parks and parklets and the expansion of areas to be used to offset carbon levels.
- By the end of 2023 1,500 trees will be planted, an increase of 20%. Cork City Council plans to increase this number year on year.

Air Quality Monitoring System

At the core of Cork City Council's Air Quality Strategy is the existence of an air quality monitoring system. This system includes a network of low-cost air quality sensors that measures PM 2.5. This real time air quality data can help Cork City Council and others to make data-based decisions and monitor the impact of these decisions on air quality across the city. This is the first low-cost air quality network of its kind in Ireland and was developed in partnership with the Centre for Research into Atmospheric Chemistry at University College Cork (UCC). The sensor data is validated against UCC's air quality monitoring station to ensure that the data is robust. The air quality data is shared with citizens through an open data air quality dashboard.

CLIMATE ACTION PLAN

Cork City Council is currently developing a Local Authority Climate Action Plan to meet and exceed national emission reduction targets and develop resilience to the impacts of Climate Change. This Climate action plan will build on the 2019 Cork City Council Cork City Climate Change Adaptation Strategy. The Climate Change Adaptation Strategy consisted of 66 actions across different areas of climate change.

As part of the strategy, Cork City Council was the first local authority in Ireland to establish a climate action committee. Through this strategy, many innovative initiatives were introduced, most notably the

retrofitting of public housing stock and the introduction of an Electric Vehicle Fleet for Cork City Council Staff.

Retrofitting of Housing Stock

As part of the Climate Adaptation Strategy Cork City Council's Housing Department is implementing several smart retrofitting projects across a portion of its 10,500 social houses.

These projects aim to explore how retrofitting and the application of smart technologies can reduce carbon emissions, improve the quality of older homes, and reduce the incidence of fuel poverty. Over half of Cork City Council's social houses were built before 1970, with some dating back to 1886. The retrofitting requirements to ensure these homes remain high-quality places to live for tenants and meet national energy efficiency goals are significant. Cork City Council is exploring combining deep energy retrofits and smart energy technologies to meet these targets.

Implementation is ongoing to deliver on the current 25% target for Cork City's public housing stock to achieve the near Zero Energy Building (nZEB) standard (as defined by national Building Regulations part L) by 2030. This would retrofit approximately 2750 units with all residual housing stock units to follow by 2050. Work is currently underway on installing 3,000 heat pumps in public housing by 2030.

Cork City Council is currently involved in several national and international projects to trial and tests smart solutions in housing retrofitting including 3 projects that involve smart energy, measuring, monitoring, and reporting systems, smart energy storage, and renewables.

The first project, funded by the Department of Housing, Southern Regional Assembly and Cork City Council has installed smart energy, measuring, monitoring, and reporting (EMMER) systems in 8 apartments located on the south side of the city. EMMR projects help the housing department to understand the impact of retrofitting activities across several parameters including energy efficiency and carbon reduction and can also help in designing predictive maintenance plans to keep the houses at their optimal efficiency.

Identifying key performance indicators (KPIs) to measure before and after retrofitting include both internal KPIs such as temperature, C02, heat pump usage, energy, and gas consumption and external KPIs such as external temperature, pressure, rainfall, and solar radiation, wind speed and direction. These KPIs are measured using a variety of tools including sensors, data loggers and digital remote monitoring and recording systems. This project aims to help validate the value and impact of deep retrofit schemes which are being rolled out and will also enable Cork City Council to accurately measure the carbon reduction of these works.

EU Project - MiniStor

Cork City Council's Housing Department has engaged in many collaborative European-funded projects including MiniStor. MiniStor, a project funded by the European Union's Horizon 2020 research and innovation programme aims to design and produce a novel compact integrated thermal storage system to achieve sustainable heating, cooling and electricity storage and reduce the carbon footprint of the home.

'MiniStor' is an innovative system for the sustainable production and storage of heating, cooling, and electricity. It is solar-driven and utilizes a combination of thermochemical (TCM) and phase change materials (PCM) for thermal energy storage (TES). This configuration enables the achievement of considerably higher energy storage density compared to competitive TES systems, i.e., almost 10 times the energy density of water, which is usually used in heat storage systems. Also, a lithium-ion battery is used for storing electrical energy.

As part of this project, Cork City Council will install an innovative home energy management system, lithium-ion battery and the 'MiniStor' innovative solar thermal system in a pre-1970s social house in the western part of the city. Throughout the demonstration phase, a series of performance KPIs will be measured including energy efficiency, storage capacity, environmental conditions, etc. The system will be monitored for at least two heating and two cooling seasons (winter and summer). Experience gained during the first year of operation will be used to gather feedback for fine-tuning the system. There is an expected 40% energy reduction predicted for this house following this project.

The home energy management system allows users to get information about the performance of their house and enables the user to control the energy usage in the house.

EU Project - REDWoLF

Cork City Council is also a partner in The RED WoLF project (Rethink Electricity Distribution Without Load Following) funded by the EU programme Interreg North-West Europe. The three-year RED WoLF project will increase renewables usage and reduce carbon emissions for homes with photovoltaic solar

panels. Cork City Council has installed photovoltaic cells and hybrid storage systems which merge batteries and storage heaters in 10 houses in two socially disadvantaged areas of the city. The heaters will provide heat on demand and the batteries will store output from the solar panels as well as low-carbon energy (wind/solar) drawn from the national grid at times of low demand. This will be enabled using new 'smart' technology through which the house's hybrid storage systems will be able to communicate with the grid and will remove the mismatch between generation and usage.

A home control system automatically makes decisions on storage based on local energy usage, the price of electricity, weather forecasts and the grid's current CO2 intensity. The purpose of the project is to see how these components interact to reduce energy consumption and greenhouse gas emissions. As a result of this project, it is predicted that up to 20 tons of CO2 will be removed from the atmosphere in Cork city each year.

The results and impact of these innovative projects are assessed following implementation and best practice learnings are integrated into the wider retrofitting program and shared with members of the public through the Home Energy Upgrade Office.

Home Energy Upgrade Office



The Home Energy Upgrade Office, situated in Cork City Centre, offers members of the public information on home energy efficiency upgrades that can be achieved to reduce their carbon emissions. The office was developed by Cork City Council with support from Sustainable Authority of Ireland, IERC, Tyndall National Institute and UCC. It is funded by two EU projects – 'Upstairs' and 'Intensify'.

Upstairs (Uplifting Energy Communities) targets the creation of energy communities and is funded by the EU's Horizon 2020 Research and Innovation Programme. An energy community is a collective

action targeting energy efficiency across homes, community centres and other projects within the community. The Upstairs project is also developing an online portal to answer any questions from the staff in the office. The Intensify Project is funded by the EU's Interreg Europe Programme and aims to engage the public and empower them with the knowledge to reduce their carbon emissions through energy efficiency upgrade measures.

Electric Vehicle Fleet

In 2020, Cork City Council took the lead nationally by investing in 76 electric vehicles, creating the biggest local authority EV fleet in the country.

The deployment of these EVs has reduced the City Council's reliance on fossil fuel by approx. 110,000 litres of diesel per year. As the vehicles have zero tailpipe emissions, CO2 and Carbon has been reduced by an estimated 270 tonnes annually. Noise pollution will also be reduced. The running costs of the electric vehicles will be approx. 30% of diesel vehicles. The deployment of these vehicles has demonstrated that EVs are viable within local authority fleets.

Cork City Council's Community Climate Action Programme 2021/2022 - A Bottom-Up Approach to Governance and Climate Action

Cork City Council understands the role citizens must play in tackling some of our biggest issues, as a result, the involvement of civil society through the Quadruple Helix model of Innovation has led to more bottom-up approaches, this is key to unlocking the potential and creativity of our citizens to solve the issues we face.

In conjunction with the Cork City Public Participation Network, the City Council has partnered with Cork Environmental Forum to work with several communities across the city to develop bottom-up local Community Climate Action Plans. Acknowledging the key role all sectors need to play to address these challenges, this programme aims to help the city and its citizens deal with the current and future climate change and biodiversity crises. The Action Programme aims to assist communities through a series of workshops to develop a 2–3-year Climate & Biodiversity Action Plan for their local area.

Sustainable Travel: Electric Bikes and Cargo Bike Library

Cork City Council aims to encourage more sustainable travel. It has made a number of electric bikes

available to Cork City Council staff who can book through an online system.

Cork City Council has also established a cargo bike fleet 'library' which is available to businesses and community groups who can borrow a bike for six months on a trial scheme to see if a cargo bike can be used on a daily basis as an alternative to other modes of transport before they invest heavily themselves. Cork City Council also utilises cargo bikes for use within the City Council across various departments. This project was initially funded through the National Innovation Fund.

Innovative and Sustainable Management of Invasive Species



Cork City Council has embraced a no-tech innovative solution for the management of non-native invasive species in a disused limestone quarry south of the city. A team of eight goats has been deployed at Beaumont Quarry to help manage non-native vegetation. The ecofriendly land management initiative is a partnership between Cork Nature Network and Cork City Council. The goats are fenced in so they can focus on the problem areas within the quarry as they eat what most animals won't eat, work in rougher terrain, along riverbanks, and on steep slopes without causing damage to the environment.

The goats offer an opportunity to educate and demonstrate the implementation of essential conservation practices and local schools are invited to watch and learn about local conservation management. Cork City Council are looking at other areas where the goats can be deployed as part of a wider conservation programme.

Cork City GBi Strategy

The Cork City GBi Strategy (2021) is a vision and framework document for delivering Green and Blue Infrastructure in the city. The strategy is framed by international, national, and regional policy objectives and the UN sustainable development goals. In developing and delivering the strategy, Cork City Council are the first Local Authority in Ireland to integrate an evidence-based and granular GBi strategy into a city or county Land Use and Development Plan. Its core objective is to support and utilise GBI to enhance the urban context, delivering on the commitments listed in Cork City's Climate Change Adaptation Strategy. The Cork City GBI Study has been transposed into the Cork City Development Plan 2022-2028 including the planning and delivery of 21 new City Scale GBI projects and new Development Management standards for protecting Watercourse corridors, Landscape protection and Biodiversity enrichment.

ADVANCING THE DIGITAL TRANSFORMATION USING INNOVATIVE CONCEPTS, PROCESSES, AND TOOLS FOR A SMART, SUSTAINABLE, INCLUSIVE CITY.

As part of the EU City Mission, Cork City is committed to developing a Climate Neural and Smart City. The remainder of this section will highlight some of the achievements to date in delivering a smarter and more digitally enabled city. Cork City Council believes in the value of digitizing services but recognizes that not all our citizens have the confidence, infrastructure, or digital skills to engage online. For this reason, our digital services are an alternative method for engaging with the city council but traditional means of engagement including in-person, post and telephone still exist for citizens accessing services.

Cork City's Digital Strategy

Cork City Council has led the development of Cork City's first Digital Strategy in consultation with city contributors and following the European Commission's Digital Cities Challenge programme. This three-year strategy, which concludes in December 2023, aspires to make Cork 'the connected city.' It aims to enhance the quality of life of our citizens and promote economic development through digital transformation.

This strategy contains 77 actions and centres around four key ambitions to enhance Cork City's digital maturity sustainably. These ambitions were developed with city stakeholders and include:

Enhancing Digital Inclusion and Digital Skills.

- Increasing Connected Services for Citizens.
- Empowering People to use Open Data.
- Utilising Best in Class Digital Infrastructure.

Cork Smart Gateway

The Cork Smart Gateway is an ongoing collaborative initiative established in 2016 by Cork's local authorities and academic partners – Munster Technological University, Tyndall National Institute and University College Cork – to support the development of Cork as a smart, sustainable, and inclusive region.

The Cork Smart Gateway aims to develop an innovative ecosystem which increases economic activity, provides better public services, promotes collaboration and engagement, and enhances the quality of life for all who live, work, and visit Cork. In 2021, the Cork Smart Gateway expanded the steering group to include the local Energy and ICT Clusters, Energy Cork and the Tech Industry Alliance as well as the Cork Chamber of Commerce.

Recently, the Cork Smart Gateway has delivered several webinars focused on emerging digital technologies with the objective of raising awareness of their potential and informing the public on their use. The Cork Smart Gateway sponsors an annual award at the ICT Cluster's Annual Tech Leader's Awards. The Smart Technology Innovation Award is presented to an organisation that has developed/integrated a technological innovation that has been demonstrated in Cork and shapes the cities and regions of tomorrow. The 2022 award was presented to the ICBF who is pioneering DNA traceability for cows to ensure that the future generations of cows in Ireland emit less carbon and demonstrate 100% transparency and traceability for consumers in the process.

Cork City Alerts

Cork City Alerts is a free email and/or text alert system for residents, businesses, and communities in Cork. Cork City Alerts aim to help citizens and businesses better prepare for emergencies and keep up to date on traffic changes and planning activity in the city.

Alerts for the following:

- Severe weather, flooding, and emergency events
- Water outages
- A weekly list of road closures and traffic diversions
- A weekly list of planning applications

Citizens can sign up for emergency, traffic and planning activity alerts at multiple locations e.g., near their home, workplace, school, college or where elderly parents live.

Public Wifi extension

Public Wi-Fi stations were installed across the city to improve the internet connectivity of the city for Cork City's citizens and visitors. Cork City Council has 19 Public Wi-Fi areas. Most recently public Wifi was extended through the Wifi4EU programme to popular community and tourist areas including Fitzgerald's Park, Cork City Public Museum, Bishop Lucey Park, Elizabeth Fort and the newly develop Marina Park.

Open Data

Cork City Council has developed an Open Data Portal to share open data sets that relate to Cork City. The CKAN based portal allows data to be shared in an open format for anyone to download, conduct research, develop applications, design data visualisation and more. CKAN is an open-source DMS (data management system) for powering data hubs and data portals. The Open Data Portal can be accessed via data.corkcity.ie. Cork City Council has installed several environmental sensors in the city to help provide real-time information about the city. Currently, sensors are monitoring real-time water levels of the river Lee. There is also real-time car parking information available for citizens.

Digital Access in our Libraries - Hublets

Cork City Libraries have procured several Hublets for some of their libraries. A hublet is a shared-use tablet which uses a smart docking station and is available for use by members of the public who use our libraries. A Hublet is an easy to use, safe and cost-effective self-service tablet solution for delivering

digital content to users of all ages, backgrounds, and abilities, enabling libraries across the world to ensure digital inclusion for all.

Cork City Libraries have rolled out Hublets to three of their libraries (Blackpool, Glanmire and Bishopstown) and these tablets have proved to be popular with customers to access online library resources and to access general online content and services. After every use, the Hublet automatically wipes the user's data fully and no personal information is stored. They are also safe and hygienic to use as they have a self-disinfecting coating. The Hublets are popular with older adults already and this will be further supported by the planned 'Age Friendly Library liaison' for each branch.

Remote Operated Vehicle for Cork City Council Fire Department

Cork City Council Fire Department successfully applied for funding through the National Innovation Fund to develop a robotic vehicle to help Cork City firefighters in high-risk environments. Currently, if the fire brigade comes across emergency incidents such as leaking hazardous materials or extremely high fire temperatures, they either must commit individuals to the high-risk environment, or not enter the area at all if the risk is deemed too high. This project is now trialling remotely operated vehicles (ROV) for firefighting, moving equipment and carrying out toxic or flammable air samples.

DIGITAL TRANSFORMATION

Digital Service Provision

Digital Government is not simply about putting front-end services online but rather it encompasses everything from the core digitisation of public services to the digital infrastructure, governance, and processes, including both front-end and back-office transformation needed to deliver services for citizens, businesses, and Government. As part of Cork City Council's digital transformation programme, an online consultation portal was launched to better enable citizens to have their say on submissions and surveys that are central to the development of the city.

An online forms submission platform was also launched in 2020 and 174 services were made accessible to citizens. In 2022, almost 20,000 submissions were made by 17,000 registered users processing over €250,000 in payments.

Cork City Council Chatbot

Cork City Council has developed and launched the first local authority chatbot in Ireland. The chatbot is available on the Cork City Council website and was developed in-house using the MS Virtual Agent platform as a pilot project launched In April 2023. The chatbot was developed to reduce the number of customer service calls by enabling customers to find the information they require more easily through our website 24/7. Currently, the City Council receives over 3,000 customer service calls per week, and it is hoped that the chatbot will reduce these calls. The Cork City Council Website receives approximately 3.25 million page views per year. In the pilot phase, the customer can complete a feedback survey if they choose which supports real-time feedback for the in-house development team who can update the chatbot with missing information and also identify high-demand content that should be included on the website.

Cyber-social project with University College Cork

Cork City Council supports University College Cork's Cyber-Social Research Lab which is developing a 3-year ethnographic study focusing on the experience of technology by people in daily life. By cyber-social we simply mean the integration of digital technologies with social life.

The intermediate objective is to conduct local ethnographic research leading to evidence-based outputs that will help allay social issues in Cork City's digital transition towards becoming a 'Smart City'. The findings from CyberSocial will provide the required evidence-based outputs to effect socially informed and nuanced policy for cultivating a socially and digitally just space for cyber-social living.

Irish Local Government Information Sharing Analysis Centre (ISAC)

In 2022 Cork City Council's ICT department in collaboration with the LGMA, the HIS Liaison Group, IVI Maynooth University, and the National Cyber Security Centre, successfully won funding through the National Innovation Fund to establish an Irish Local Government Information Sharing Analysis Centre (ISAC). Information Sharing Analysis Centres (ISAC) are non-profit organisations that provide a central resource for gathering information on cyber threats as well as allowing two-way sharing of information between the private and the public sector. The ISAC is comprised of all 31 local authorities and the Local government management agency.

Award criterion 2, Escalating – accelerating the growth of highly innovative start-ups and SMEs by establishing an innovation-friendly legal framework, creating an environment that stimulates growth, private and public investments, resources, diversity, and talents; and driving innovation demand through efficient innovation public procurement. In this criterion, among others, the applicant should consider providing information about concrete actions taken to pursue the growth of highly innovative start-ups and SMEs, as well as their quantitative and qualitative implications and/or impact about actions to promote the use of innovation procurement, or about actions aimed to promote investments and growth within the city. The city is expected to provide details on concrete results of the showcased initiatives.

A BUSINESS ENVIRONMENT THAT HELPS BUSINESSES TO SUCCEED.

Cork City has demonstrated a strong track record in recent years as a supportive place in which to start, grow and scale innovative start-ups. The city benefits from 35,000 third-level students, with two Universities – University College Cork (UCC) and Munster Technological University (MTU), as well as several well-established and successful start-up accelerator programmes. These include the New Frontiers Programme in MTU which supports around 12 new start-ups each year and the Ignite Programme in UCC. Cork has a strong track record in starting and growing innovative, internationally focussed Irish startups that include Voxpro; Teamwork; Trustev; Crest Solutions, Practice Evole, Aspira Qumas – to name just a few. Cork continues to produce more exciting and disruptive technology startups. Some of the newer 'ones to watch' include Keelvar, a Global Procurement Tendering Analysis Software using which has raised over €100 million, and now employs over 100 people in Cork, with offices in Germany and the USA.

Enterprise Ireland



Enterprise Ireland (EI) is the government agency responsible for the development and growth of Irish enterprises in world markets. EI's strategy focuses on addressing the need for greater scale across Irish enterprises through promoting innovation, competitiveness, diversification, and global ambition in its client companies. EI works

in partnership with high-growth Cork City enterprises to help them start, grow, innovate, and win export sales in global markets. This is achieved through an extensive range of pre-seed start-up funds, financial support, mentoring and innovation vouchers.

Enterprise Ireland figures showed that in 2021 in Cork City and County, there were:

- 457 SMEs were supported by Enterprise Ireland.
- These companies employed 24,962 people.
- €41.9 million invested in SMEs by Enterprise Ireland.

Cork City Council and The Local Enterprise Office Cork City also work extensively with Enterprise Ireland to develop incubators/hubs and enterprise programmes in Cork City. Through this funding mechanism, Cork City Council developed Benchspace, Ireland's first open-access factory/Incubator offering industry-grade tools, technology, and business support for professional makers & creative start-ups.

Local Enterprise Office Cork City



The Local Enterprise Offices (LEO) are a business's local first-stop shop for seeking information and support on starting or growing a business in Cork City. The Local Enterprise Office provides advice, information, and support to businesses employing less than 50 employees who are seeking to start or grow their business. The Local Enterprise Office also offers a wide range of financial and non-financial support to small businesses. The Local Enterprise Office works in conjunction with all relevant stakeholders including, University College

Cork, Munster Technological University and Cork BIC to create a highly supportive eco-system for small businesses in Cork City.

The role of the local enterprise office is to:

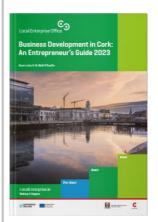
- To drive the development of local enterprises, local micro and small business at the heart of job creation in Cork City.
- To drive and support business start-ups and promote a 'can-do' business culture.
- To increase the job potential of new and existing micro and small businesses.
- To increase the number of innovative businesses with the potential to export.

To be proactive in response to the needs of our clients.

In 2022

- 1621 people attended LEO-run programmes.
- 270 people availed of the mentoring services provided by the LEO.
- 161 people attended one-to-one business advice clinics run by the LEO.
- 96 Trading Online Vouchers were awarded.
- 44 potential jobs were created by grants awarded by the LEO.
- 35 businesses were awarded grant aid.
- 16 schools were supported in the student enterprise programme.
- 23 Green for Micro grants were awarded.

Local Enterprise Office, Cork City: 'Business Development in Cork: An Entrepreneurs Guide 2023'.



In 2022 after identifying a knowledge gap, the Local Enterprise Office, Cork City produced a booklet entitled "Business Development in Cork: An Entrepreneurs Guide 2023". The purpose of the booklet was to provide an extensive overview of the public and private support available to SMEs in Cork.

The booklet also contained essential information for new businesses and included case studies of best practice from local businesses. The booklet was the first of its kind in Ireland and was launched by Minster for Enterprise, Trade and Employment, Simon Coveney. Minister Coveney hailed the booklet as a very innovative initiative. Within the first week of publishing the booklet received over 1000 views on Cork City Council's website.

The Rubicon Centre – Munster Technological University



The Rubicon Centre is a university campus-based incubation Centre supporting Cork City and County in Ireland. Acting as an enterprise hub; It provides support to entrepreneurs to Start, Accelerate Grow and scale their businesses. The incubator focuses on Entrepreneurs who have innovative ideas, and who can benefit not only from the support of the incubator but also those of the Munster Technology University (MTU). The Incubator has Alumni

of 500+companies based across Cork City & County

The incubator works daily with many entrepreneurship stakeholders including the Local Enterprise Offices, Enterprise Ireland, Cork City and County Councils and several business and technology clusters. The Rubicon supports entrepreneurs who come from a wide variety of backgrounds. These entrepreneurs are based both on the Rubicon and off-campus.

The core offerings are mentoring, training, incubation facilities and access to finance. In addition, several targeted measures have been developed including a programme for women entrepreneurs, support for student entrepreneurs and companies which are scaling or want to scale, to take advantage of new opportunities in national and international markets. These measures include Exxcel (Support for Women Entrepreneurs), Scale Cork (Scaling Programme for Companies in partnership with Cork County Council) and a partner with MTU in Student INC (an accelerator for undergraduates).

The Rubicon is a key partner in supporting entrepreneurs in Cork City, its impact can also be measured under the following headings:

- An innovation hub for entrepreneurs at all stages of development within the city
- A catalyst for sustainable employment with over 3000+ direct jobs created by client companies and many spin-off employment opportunities.
- Unique offering providing both commercial and product development support through the host Technological University facilitation entrepreneurs to develop all aspects of their business.
 - Active international Linkages in USA, UK, France, and Vietnam which benefits Rubicon Clients

to access finance and new markets.

Since 2012, the Rubicon has

- €88 million has been raised from Private and Public Sources.
- 1,670 Jobs Created
- 88% Client Survival Rate
 - 17 High Potential Start-Ups created which have progressed to Enterprise Ireland.

New Frontiers - Munster Technological University



New Frontiers is an entrepreneurship programme run by Munster Technological University and Enterprise Ireland. It helps new businesses move from business ideas towards an income-generating and investor-ready startup. Participants receive mentoring, training, incubation space, access to R&D facilities, and financial support.

Participants can engage with the programme through three phases:

Phase 1 - Feasibility Stage

Participants receive 30 hours of training outside of normal work hours, allowing them to keep their existing full-time commitments. At the end of this phase, participants decide to pursue their business opportunities.

Phase 2

This Phase takes the Participant from Feasibility to Start-up.

Phase 3

This stage proves some participants who have not secured either funds or a first customer with additional space to achieve these two key outputs.

Impacts

From 2012-2020 there were 292 participants in New Frontiers Phase 1 and 113 participants in New Frontiers Phase 2. An additional 70 businesses participated in New Frontiers Phase 3.

A number of these businesses received funding including:

- Competitive Start Funding 27
- HPSU Investment 9
- Local Enterprise Funding 90
- Other funding (ESA BIC/NDRC/H2020/Ycombinator/Seedcorn/Aldi Go for Growth) 16.

Ignite – University College Cork

UCC has a long history of working collaboratively with local partners, such as the City and County Councils, Cork Chamber of Commerce, Local Enterprise Offices, Cork BIC, Republic of Works etc to develop and grow new businesses, as well as supporting SMEs and MNC research and innovation through collaborative programmes.



IGNITE is a unique initiative that supports recent graduates in the region to start scalable enterprises for positive economic, social, or environmental impact, by harnessing the resources of Cork City Council, Cork County Council, the Local Enterprise Offices of Cork City and County, UCC and business leaders.

Mission:

- Encourage, promote, and nurture entrepreneurship in recent graduates.
- Provide a programme to select graduates that will deliver entrepreneurs driving scalable, jobcreating, commercially successful businesses, in chosen sectors, in a 3-to-5-year period.
- Deliver in partnership with chosen industry sectors, entrepreneurs who seek to create businesses in response to future global and national market needs.
- Optimise the accessibility to the expertise available within UCC.

Be an internationally recognized University-based incubation programme.

IGNITE achieves this mission through a structured programme of workshops, seminars, guest speakers and mentors; access to a shared workspace at UCC's Western Gateway Building, business networks and small seed funds; and exposure to a culture of innovation and entrepreneurship. Typically, over 100 business owners and entrepreneurs contribute to the programme as guest speakers, mentors, reviewers and judges every year.

Impacts

The programme has supported 166 founders working on 157 start-up ideas since 2011. Research carried out in late 2022 demonstrated that these founders are actively involved in 86 businesses that have created 369 jobs. IGNITE-supported start-ups have raised over €23M in funding and are estimated to have paid €14M in salaries to staff in the locality in 2022.

IGNITE start-ups and founders have been recognized at international, national and regional levels. Most recently:

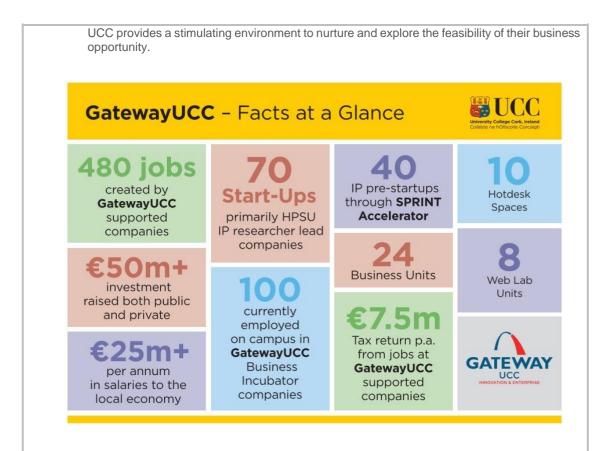
- Apr 2020 Apisprotect, founded by Dr Fiona Edwards-Murphy, won a Think Global Award from the Think Global Forum.
- June 2020 Dr Mark O'Sullivan, promoter of Neurobell, won Enterprise Ireland's Student Entrepreneur of the Year Award.
- Apr 2021 Dr Fiona Edwards-Murphy, the founder of ApisProtect, was honoured with inclusion in the 2021 European Forbes Under 30 list of the world's most impactful community of young entrepreneurs and game-changers.
- Jun 2021 Marion Cantillon, the founder of PitSeal, won the Cruickshank High Achieving Merit Award at the 2021 Enterprise Ireland Student Entrepreneur Awards.
- Jun 2022 Dr Mark O'Sullivan of Neurobell won the top prize in the 2022 Ideate Ireland competition.
- Mar 2023 LegitFit, founded by Ryan O' Neill, Gearoid Collins & Ian O' Sullivan, was named Cork Chamber Emerging Company of the Year.
- IGNITE has also supported over 325 students, staff and alumni to identify and develop new start-up ideas through.
- START-UP LAB (evening part-time programme) over 250 students, staff and alumni https://www.youtube.com/watch?v=B3V3ixFYYLg&t
- IDEAS FOR IMPACT (12-hour Hackathons)
- SDGs Summer School Developing innovative solutions to SDG challenges this 5-day programme aims to increase awareness of how research can impact the UN's Sustainable Development Goals, while also supporting their endeavours through entrepreneurship, idea generation and innovation. Open to anyone at UCC, but with particular relevance for PhD and master's by Research students.

And many thousands of undergraduate and postgraduate students, staff, and alumni of UCC and other third level institutions have been exposed to innovative thinking and inspired by IGNITE's entrepreneurial start-up founders.

Gateway – University College Cork

Gateway UCC supports researcher led start-ups and spin-out companies that have created more than 450 jobs since 2012. In that time, Gateway UCC supported companies have raised over €50 million of public and private investment, supporting over 70 start-ups. These IP based companies have contributed more than €25 million a year in salaries to the local economy.

- SPRINT Accelerator Programme. https://www.ucc.ie/en/gateway/sprintacceleratorprogramme/ Designed to support early-stage start-ups, entrepreneurs and UCC-based researchers, SPRINT focuses on the commercialisation of UCC-generated technologies and routes to market. SPRINT delivers all the information these companies need, giving them the correct information at the correct time, so that they can make better business decisions and avoid the pitfalls many fledgeling companies fall into due to lack of knowledge and experience. This is a part-time programme (0.5 days/week).
- The Gateway has Incubation Space. Encompassing c. 1,400 sq m, including 25 incubation units, 'wet-lab' space to accommodate biotechnology companies, and hot-desking facilities,



University College Cork - Health Innovation Hub Ireland

Health Innovation Hub Ireland, headquartered in UCC, works across the health sector in Ireland with Irish businesses to creatively solve problems and improve patient care, often leading to the creation of new companies. Harnessing this innovation, through the development of new healthcare technologies, products, and services, helps to create Irish jobs and exports.

Explorer – Tyndall National Institute

Explorer is a deep-tech pre-accelerator run by the Tyndall National Institute in UCC. It is a collaboration between the Irish Photonics Integration Centre (IPIC), international high-tech photonics Osram Opto Semiconductors, Confirm Centre, CONNECT Centre and with support from Atlantic Bridge, Intel, IPCEI, Midas, Nova UCD and Science Foundation Ireland. A 3-month part-time programme that runs from Feb-May each year, typically with 5 teams.

Cork BIC

CorkBIC is an organisation specifically set up to identify and build knowledge-intensive companies based on promising technology and capable innovative people. It plays a handson role in helping entrepreneurs navigate the minefield of raising finance, sorting out business propositions, arranging agreements with shareholders and investors, and, perhaps most important of all, finding customers.

Every year, CorkBIC identifies, selects, and develops several high-potential startups or expansions. At any one time, there are 50+ projects in the pipeline. 85% of startups engaging in this integrated process survive after five years, far outstripping the international survival average of 50%. CorkBIC has worked with over 500+ startups, and many come back and re-engaged. Increasingly CorkBIC works in the scale-up arena internationally to bring experienced teams to address disruptive opportunities with strong governance and market focus.

CorkBIC works closely with Enterprise Ireland to prepare and support High Potential Start-Up (HPSU) Companies. HPSUs are start-up businesses with the potential to develop an innovative product or service for sale on international markets and the potential to create 10 jobs and €1m in sales within 3 years of starting up.



Raising Investment

Most start-up businesses need external funding to get off the ground. CorkBIC help start-ups to develop a well-tested business plan that identifies how to harness the opportunity and what funding might be required and plays a hands-on role helping each entrepreneur navigate the minefield of raising finance, sorting out business propositions and arranging agreements with shareholders and investors.

To fund a business plan there are a myriad of investment possibilities from Angel Investors, VCs, tax rebates and exemptions, to grants, loans, equity investments and hiring incentives. CorkBIC helps and advises entrepreneurs to choose the best option for them and their startup businesses.

CorkBIC Growth Pathway Programme

The Annual CorkBIC Growth Pathway programme is unique, involving SMEs, Startups and a network of experienced Entrepreneurs focused on building the next generation of high-performance companies. Three key elements run annually: The Entrepreneur Experience™, The Celebration of High Growth Startups & The Venture Academy® as well as associated activities, training, pitching and client planning. Cork City Council is one of the founding partners alongside Cork County Council.

To date the Growth Pathway initiatives have assisted 380 companies, creating 80 HPSUs, with 110 companies raising over €130 million over the past 11 years. Within the Growth Pathway, the power to achieve strategic change within scaling companies is having an impact. This creates employment and a strong culture to build sustainable Cork businesses like Crest Solutions, Poppulo and Compliance and Risks.

The Entrepreneur Experience[™] is a unique event for 24 High-Growth & Scaling Entrepreneurs to gain unparalleled access, advice and mentoring from 24 of Ireland's most successful business leaders over 24 hours. The Entrepreneur Experience, over the last 12 years has become one of the key pillars of Entrepreneurship in Ireland supporting over 300 Entrepreneurs from all over Ireland and abroad. To date, 300+ companies have participated, and over €92 million in investment has been raised.

- The 2022 Entrepreneur Experience™ took place on October 14 & 15 in Cork
- 64% of the Emerging Entrepreneurs participating had a female founder or co-founder
- 20% were Social, Sustainable and Impact driven businesses.

At The Venture Academy®, pre-screened investment opportunities across all sectors pitch to an audience of Investors & Entrepreneurs. Here the companies get feedback and coaching on their investor

pitch and very often raise investment from participation. In March 2023 seven Startups pitched for €6.5 million and to date, over €25 million investment has been raised in the past 10 years.

The celebration of High Growth Startups acknowledges the success and growth of some of the companies that CorkBIC have worked with and invites them to participate in this event to encourage others to join on the Entrepreneurship journey.

CorkBIC Partners in Europe & Internationalisation

CorkBIC is globally connected but regionally focused. CorkBIC understands how important it is for Startups to have an international focus to grow and expand their businesses and works with them to ensure businesses can achieve a 'soft landing' in key international markets. CorkBIC is a certified EU|BIC, member of the European Business and Innovation Centre Network (EBN). EBN is the leading international, non-profit association of quality-certified EU Business and Innovation Centres (EU|BICs), incubators and other innovation brokers and business support structures (i.e. accelerators, clusters, investment funds).

CorkBIC is a member of EBAN, (the European Business Angels Network) which is the pan-European representative for the early-stage investor community gathering over 100 member organisations in more than 50 countries. In 2022 CorkBIC organised the European Business Angel Network (EBAN) Annual Congress in Cork where 350 business angels, entrepreneurs and business leaders attended, making it the second-largest angel congress in the world in 2022.

The CorkBIC International Security Accelerator

This World Class Security Accelerator invests in early-stage disruptive companies in the security industry including, Cybersecurity, the Internet of Things (IoT), Blockchain, AI, Health & Bioinformatics, Defence, Critical Infrastructure, Financial Services & Logistics. The International Security Accelerator, managed by CorkBIC, based in Cork, is an intensive 13-week program of mentoring and in-depth workshops with a focus on the team, technology, business model, market opportunity and investor readiness. To date, CorkBIC has run 3 cohorts of the Accelerator. The companies are now valued at €92.3m post-money valuation, has raised €37.5 million in investment and created 134 jobs (end of 2021).

Cork City's Republic of Work

Cork City's Republic of Work co-working hub, which is situated in the very heart of the city, is one of five regional strategic partners for the National Digital Research Centre (NDRC). This €17m contract sees the Republic of Work, in collaboration with its network of partners, deliver a mentorship-driven accelerator and pre-accelerator programmes as well as pre-seed funding to entrepreneurs across Ireland, investing in globally focused, high-impact start-ups, to create internationally scalable Irish companies. These accelerators are part of a very important and effective ecosystem that stimulates and accelerates the growth of highly innovative start-ups and SMEs in Cork City.

INNOVATIVE PUBLIC PROCUREMENT

Development of Social Enterprises - Cork City Council

In 2022 in collaboration with Rethink Ireland, Cork City Council sought to develop Cork City's Social Enterprise Sector. What followed was the development of strategic partnerships and initiatives which sought to put social enterprises in connection with potential procurers of their goods and services.

The highlight of this was when Cork City Council hosted the #BuySocialIRL event in Cork City Hall intended to encourage social enterprises to display their services and products for sale, highlight their work and allow potential purchasers of their wares to interact and meet. The meet and greet event. Cork City Council and the Local Enterprise Office have committed to where possible, procuring from Social Enterprises for future events throughout the year.

Our societies face pressing challenges when it comes to the Green and Digital transitions, to meet these challenges Cork City Council has realized the importance of innovative public procurement to unlock the creativity and potential of our people and local businesses to solve the issues we face.

Unheard Voices Project

Citizen engagement projects are central to the smart agenda. An example of this is the Unheard Voices project that Cork City Council in collaboration with Fingal County Council (Dublin). This project used an

innovative challenge-based procurement initiative and was cofounded by Enterprise Ireland. The challenge aimed to find new, technological solutions to help individuals and groups engage with their local authority, focusing on young people, migrant groups, and others not traditionally reached with existing methods. Technology providers were invited to pitch ideas that would complement, rather than replace, traditional methods of engagement. Four companies worked to develop their solutions, testing and piloting with Fingal County Council and Cork City Council,

As a result, a participatory grant portal called "Cork Voices "was developed. Using the portal, local community groups were invited to submit short video pitches for community funds. A wide range of exciting community projects pitched for funding including:

- Cork Nature Otter Walk
- Comhairle na nÓg Suicide Prevention Summer Event
- International Community Dynamics Direct Provision Workshops

Citizens were invited to vote on their favourite videos in June 2019.

With a total of over 2,000 votes, six organizations were successfully awarded grants of between €400– €750. These grants support community programmes that deliver positive outcomes for the people of Cork. The "Unheard Voices" challenge has been an important learning experience for Cork City Council. We have learned a lot about how technology can promote citizen engagement and reach communities that may experience exclusion.

Award criterion 3, Ecosystem building – unlocking the city's potential as local innovation ecosystem facilitator by fostering synergies among different innovation ecosystem players, from public, industry, startups, civil society, citizens to academia, to contribute to the development of an innovation ecosystem within the city. In this criterion, among others, the applicant should consider providing information about the role of the city on boosting the city's innovation ecosystem: e.g., is the city a key actor in these interactions? The applicant is expected to provide details on concrete results of the showcased initiatives.

POLICY CONTEXT

Innovation is a key policy objective enshrined in national, regional, and local policy in Ireland and Cork. The National Planning Framework (NPF) is a national document that will guide high-level strategic planning and development over the next 20+ years and sets out several key strategic outcomes. This Plan sets the context for each of Ireland's three regional assemblies to develop their Regional Spatial and Economic Strategies (RSES) taking account of and coordinating local authority county and city Development Plans in a manner that will ensure that national, regional, and local plans align. High among the strategic outcomes is No 5: A strong, Economy supported by Enterprise, Innovation and Skills and this policy cascaded through the regional and local development plans.

The Southern Regional Assembly (of which Cork City is a part), has set out in their RSES their regional policies which include delivery of innovation through Smart specialization. This is where urban centres, where significant compact growth will occur to drive and diversify local economies, will enhance their competitiveness, and strengthen their economic growth by developing their local economic strengths. As stated, "to remain competitive, we need a relentless focus on innovation..." to achieve economic resilience.

Cork City and its metropolitan region have significant strengths through its high level of FDI companies in key sectors such as Bio Pharma, ICT, Energy, and Internationally traded services along with its worldclass research and innovation credentials with its two world-class universities, University College Cork and Munster Technological University. Cork City also boasts several research institutes which are wellpositioned to grow and develop its smart specialisation assets. Cork City's recently approved City Development Plan 2022- 2028 has a key high-level goal of achieving its reputation as an innovative city through supporting FDI along with indigenous entrepreneurship and innovation along with Research and Development.

Cork Innovation Forum

Driven by the development of this submission, it is Cork City Council's ambition to redevelop the Cork Innovation Forum to act as a collaborative engagement of partners seeking to increase the level of awareness locally, nationally, and internationally of innovative activities in enterprise creation in Cork. The Partnership will focus on

Active and collaborative engagement across the community.

- Streamlining the innovative thinking in Cork City to drive a coordinated innovation agenda.
- Strong and reinforced place brand messaging
- Outreach activities
- Amplify the economic reputation and perception of Cork as a location for business.

The innovation forum membership is comprised of Cork City Council. Cork County Council, University College Cork and Munster Technological University, Cork Chamber, and industry representatives.

CITIZEN ENGAGEMENT AND PARTICIPATION

Cork City Council understands that the citizens of Cork City have a key role to play in the development of our city, Cork City Council has involved our citizens in the policy formulation process through various public consultations and this will continue going forward.

City Development Plan – "Our City Future"

The Cork City Development Plan 2022-2028 "Our City Our Future" is the single most important strategic document for Cork City, it sets the vision for Cork City and outlines the development that will occur in Cork City over the next 6 years. A vital part of the preparation phase for this plan is the Public Consultation which gives each citizen a say in how Cork City develops. Cork City understand that People are the key to successful cities.

Whilst providing excellent transport infrastructure and services is vital to the future of Cork, this should be secondary to ensuring that people are the priority. The consultation was widely promoted via the City Council's website, radio, newspapers, and social media platforms, under the "Our City, Our Future" banner. The Covid-19 public health crisis and the related restrictions on public gatherings provided a significant and unprecedented challenge to the consultation process.

Notwithstanding this challenge, the Council engaged with the public and other stakeholders in several ways. There was a high level of engagement which is a tangible indication of the genuine interest that the residents of Cork have in the future of their city. Cork City Council engaged with the public and other stakeholders in the following ways:

- Submissions received to the issues paper
- Online Webinars
- An online survey
- One-to-one consultation
- A young person's photograph competition

390 submissions to the Issue Paper were received. This compares with the 106 submissions received in response to the 2015-2021 City Development Plan Issues paper in 2013, an increase of 270%.

Citizen Engagement Survey

Citizen engagement is a priority of the collaborative Cork Smart Gateway Smart City and Region Initiative. The Cork Smart Gateway and the International Energy Research Centre (IERC) carried out a series of surveys as part of the CorkCitiEngage project to better understand Cork citizen's opinions about the Cork region and its future development. The project used crowd-sourced information gathered by student volunteers going door-to-door and combined these results with an online survey.

There were 3,599 responses to these surveys which captured the views of Cork citizens, senior citizens (over 65 years), youth (16-18 years) and local authority employees. The results of the surveys highlighted the desire of citizens to be given more opportunities to engage in activities in their city and highlighted the importance of different forms of engagement including digital methods of engagement.

Climate Neutral Cities 2030

As mentioned, Cork City was recently selected to partake in the first 100 Climate Neutral and Smart Cities 2030 programme. The goal of this EU initiative is to support, promote and highlight 100 European cities in their systemic transformation towards climate neutrality by 2030 and make these cities into experimentation and innovation hubs for all cities, thus leading to the European Green Deal and Europe's efforts to become climate neutral by 2050.

Achieving this goal will involve extensive citizen engagement and will call upon Cork City's innovation eco-system to deliver solutions which will help us on the city's journey to climate neutrality. The journey

will involve creating synergies with and between existing local and European climate initiatives and stakeholders such as the Covenant of Mayors, the EIT and its relevant KICs, the Green City Accord, the European Green Capital Cities, the SET-plan and the 100 PEDs initiative, the EIP-SCC and the lighthouse projects, CIVITAS.

Cork City's Local Economic and Community Plan 2023-2029



The LECP is a six-year, statutory plan that sets out the objectives and actions needed to promote the community and economic development of Cork City's neighbourhoods and communities. Connecting Industry, Academia, and Sector Stakeholders.

As part of developing the plan, Cork City Council conducted an extensive consultation phase over 12 weeks. The Consultation sought to be as inclusive as possible and Cork City Council engaged with University College Cork's Civic Engagement Unit to hold a

series of City Labs which engaged with the public, community and inter-agency groups, economic stakeholders, senior Cork City Council staff and local councillors. There was also a special focus on reaching the seldom heard and bespoke workshops helped to 'meet people where they're at'. Marginalised groups such as people with disabilities, single parents and young people were all involved in co-creating workshops that fit their needs. There was also the option of completing online submissions and a survey. Over 2000 people attended the City Labs and over 700 online submissions were received.

Due to the success and inclusive nature of the consultation Cork City Council LECP consultation will be used as a case study to highlight best practices by Pobal. Pobal works on behalf of the Irish Government to support communities and local agencies toward achieving social inclusion and development. The case study from Cork City Council will appear alongside those of the four Local Community Development Committees (LCDCs) involved in the Dormant Accounts Fund Engagement Project as pilot projects funded to undertake extensive, meaningful engagement with groups seldom heard as part of their LECP development process. Other case studies will feature good examples from local authority areas and beyond of good practice in inclusive community engagement.

City Wide Collaboration

Cork City is home to several industry representative groups which connect industry leaders to drive collaboration and innovation.

Energy Cork Cluster



The Energy Cork industry cluster was established in 2012 as an innovative industry-led cluster for the energy sector to serve Cork City and the wider Cork region. The Cluster remains the most significant energy and climate actionorientated industry cluster in Ireland. Energy Cork is funded in large part through support from Cork City Council's and Cork County Council's respective Economic Development Funds. Cork City's commitment to promoting cooperation, innovation and effective eco-system building through support for Energy Cork has led to its growth to over 95 member companies employing 5,000 people in the Cork Region.

Energy Cork was designed to ensure that its strategic direction is industry-led and focused on the needs of members, while also contributing to Cork City's innovative vision for cooperation between the public sector, industry, academia, and communities. This has been particularly the case in Energy Cork's climate action initiatives which support the ambitions of Cork City to reduce greenhouse gas emissions and reduce dependency on imported fossil fuels. Cork City's recent designation as one of the EU's first 100 Climate Neutral and Smart Cities by 2030 adds a new sense of urgency to this ongoing cooperation between industry and local authorities.

Energy Cork is governed by a 24-person Steering Group drawn from industry (including SMEs), research, academia, national government bodies and local authorities. The Cluster delivers a range of networking and informative events throughout the year, in addition to sector-specific initiatives addressing areas of interest for the Cork Region e.g., sustainable transport, green hydrogen, offshore renewables, community energy and home energy upgrades.

From its beginning, the Cluster has been a vehicle for innovation and creativity in enabling the energy sector and the Cork Region, which is Ireland's Energy Hub, to address the challenge of climate action.

SME Energy Champion

Energy Cork, the industry cluster for the energy sector in the Cork Region, has developed and

implemented the SME Energy Champion initiative since 2021 along with our colleagues in Cork Chamber. The initiative actively seeks out and supports SME businesses in the Region to manage their energy use, greenhouse gas emissions and energy costs by effective energy management, auditing and employing best practices relevant to their industry.

SME Energy Champion initially ran a pilot phase with 12 SME participants over 12 months. The next phase, currently being designed, will see up to 100 Cork SMEs sign up to actively manage their energy use. This initiative fosters a sense of collaboration and mutual support amongst SMEs in the Region facing the challenges of implementing climate action and managing volatile energy prices.

Cyber Ireland

Cyber Ireland - the national Cyber Security Cluster that brings Industry, Academia, and Local Government together to represent the Irish cyber ecosystem. The cluster is based in Cork and aims to position Ireland as a world-class cyber security practice, solutions, and investment hub. Cyber Ireland aims to facilitate the cyber security ecosystem to capitalise upon this opportunity. This cluster was recently financially supported by Ireland's Enterprise development agency Enterprise Ireland to broaden its remit to develop a Cyber Security SME Cluster to drive the development of indigenous cyber security SMEs and digitally dependent SMEs with a need for cyber security solutions. It will include a start-up ecosystem and will foster productivity, drive competitiveness and support internationalisation. It will leverage the connections with industry through the national cyber security cluster organisation, Cyber Ireland.

Tech Industry Alliance

Tech Industry Alliance- is a member-driven technology cluster which includes over 180 members. In recent years this cluster has focused increasingly on increased engagement with indigenous SMEs and driving collaboration and innovation across the breadth of its network. A not-for-profit organization, TIA works with academia, industry, local government, and state agencies to provide networking, upskilling and collaboration opportunities and promote member organisations as well as the region as a technology excellence hub. TIA is a member of the European Cluster Collaboration Platform (ECCP). It is also building relationships with other European clusters in Malta and Spain. Secured the European Secretariat for Cluster Analysis (ESCA) bronze label – 'Striving for Cluster Excellence.

Shandon Innovation and Community Hub



"Recreate Shandon", in partnership with Cork City Council as partners and owners of the Shandon Butter Market, are planning the restoration and refurbishment of the Shandon Butter Market to its transformation into an exciting innovation Hub and Community Space for Cork City – the "Shandon Exchange".

Cork's Butter Market was established during the latter part of the 18th century at a time when Cork City's population rose dramatically from 17,000 to 60,000 because of the Industrial Revolution. At the same time, Cork became Ireland's major Atlantic port. As Cork became the largest port of the British Empire the butter market grew to become the largest in the world and a major centre of butter distribution on the international market.

The state-of-the-art Shandon Exchange will attract high-tech start-up enterprises in the ICT and Digital Sectors. The Shandon Exchange will be an exchange in the true meaning of the word. It will be a space where businesses, universities, and multinationals can exchange ideas, innovate, and develop cutting-edge products and services in the heart of Cork City.

Importantly, the Shandon Exchange will provide the local community with much-needed training and meeting facilities, and act as a catalyst to regenerate the Shandon area. This project is at the final stage of feasibility and work is expected to commence in 2024.



Project Outcomes

- Leverage the strong enterprise and innovation ecosystem of the Cork region to support a growing need for office space and enterprise support in the start-up high-tech/ digital sectors.
- Provide over 50 jobs in Shandon one of the most historic parts of Cork City.
- Create a space for start-up businesses, universities, and large businesses to innovate and develop world-class products and services.
- Provide business mentoring, advisory, training and networking services all aimed at supporting business innovation.
- Provide assembly rooms, meeting rooms, training facilities and amenities for the local community in Shandon.
- Act as a catalyst to regenerate the Shandon area through the redevelopment and sustainable use of the Butter Market.
- Contribute to the development of the start-up and innovation ecosystem in Cork.
- The Shandon Exchange will be unique, in one place businesses will be provided with a full range of supports, including grant aid, mentoring, networking and links with universities and industry while engaging meaningfully with the local community.

WORLD-CLASS RESEARCH CENTRES

Cork City is home to world-class research centres which provide cutting-edge research in many different areas. Many of these research centres work collaboratively with the city's two universities and industry. Several of these research centres are members of the Science Foundation Ireland (SFI) Research Network which allows them to tap into national knowledge and disseminate learnings.

ENTIRE European Digital Innovation Hub

The ENTIRE European Digital Innovation Hub is a non-profit initiative focusing on organizations active in the digitalisation of the Agriculture, Energy and Transport sectors, advancing the exploration, exploitation, and investment by Irish SMEs and public authorities in the utilisation of intelligent secure IoT sensors, networks, and software.

ENTIRE brings together the strongest innovation experts in digital technologies from across the Southern Region of Ireland. The ENTIRE Digital Innovation Hub's strategic mission is to offer the innovation expertise of Tyndall in IoT Smart Sensors, Walton Institute (SETU) in IoT Networks and HPC, MTU in Cybersecurity & vertical systems integration, UCC in Artificial Intelligence, and Skillnet in SME Digital Skills Onboarding as well as to broker all necessary technical, business, financial, investment and training support services across the value chain.

By doing this, the ENTIRE Hub will help companies, in particular SMEs, start-ups, and public authorities to become more competitive by using digital technologies in their business/production processes, products, or services. Headquartered in the Tyndall National Institute, Cork City, ENTIRE's region spans nine counties, supported by 10 Local Authorities. The Southern Region hosts approx. 100,000 SMEs (employing over 295,000 people) and 386 Multinational Enterprises employing over 75,000 people. Several funding opportunities will be open to SMEs to accommodate business needs relevant to prototype development and training. More details on the various offerings will materialise in 2023.

CAPPA Centre for Advanced Photonics and Process Analysis (MTU)



Innovation Through Light

The Centre for Advanced Photonics and Process Analysis (www.cappa.ie) is a leading-edge Photonics research centre based in MTU Cork. The centre has some €6M worth of current research projects ranging across multiple sectors, from food, pharmaceutical, medical device, environment, lighting and optical design and life sciences. The use of light as a diagnostic tool or sensor can be widely applied in

manufacturing, communications, transport and energy efficiency.

The centre collaborates strongly with its close regional academic partners, UCC, Tyndall National Institute and MTU Kerry and also has a significant collaborative research links with local and regional industries.

Through the Enterprise Ireland Technology Gateway program* CAPPA provides a variety of supports for start-ups, small to medium enterprises and multinationals in the region, to strengthen ties and develop in-house expertise within the companies. Areas such as product development and process analysis are key core competencies. CAPPA also provides expertise in understanding the potential funding landscape for collaborative and in-house R&D projects.

*The Enterprise Ireland Technology Gateway Programme is co-financed by the Government of Ireland and the European Union through the ERDF Southern, Eastern & Midland Regional Programme 2021-27 and the Northern & Western Regional Programme 2021-27.



Tyndall National Institute



Tydall, University College Cork and Meta

Tyndall National Institute, based in University College Cork, is a leading European deep-tech research centre in integrated ICT (Information and Communications Technology) hardware and systems. Specialising in both electronics and photonics – materials, devices, circuits, and systems.

Meta is teaming up with the European deep-tech research centre Tyndall National Institute for a fouryear programme to help advance augmented reality technology. It is understood the programme, which will focus on improving displays for augmented reality, represents a €5 million investment by the social media giant. The research programme will be led by Tyndall's Professor Paul Hurley, who has been appointed as Meta's industrial chair in Semiconductor Technologies at Tyndall and the School of Chemistry at UCC. He will also appoint a team of PhD students from Tyndall to work on the project, alongside Meta.

The project will focus on key AR technology such as miniature light display technologies. "The goal of this research engagement with Meta is to investigate heterogeneous systems and determine their impact on efficiency, further informing critical technology adoption in future products," said Prof Hurley.

Science Foundation Ireland ARC Hubs (Accelerating Research to Commercialisation)

ARC Accelerating Research HUB to Commercialisation

Tyndall is also bidding to host Science Foundation Ireland's ARC hub. The goal of the SFI ARC Hub Programme is to establish a new model for regional innovation and entrepreneurial training, that will catalyse a step-change in the translation of cutting-edge publicly funded research toward impact at a regional level. The SFI ARC Hub Programme will enhance and accelerate the commercialisation of research to create new products, processes, and services. The realisation of the programme will be through the establishment of a regional SFI ARC Hub focused on specific thematic areas that will be aligned with the respective regional strategic priorities and the 'National Smart Specialisation Strategy for Innovation 2022-2027' (S3).

If Tyndall is successful, The SFI ARC Hub, will create a regional ecosystem focused on optimising research translation and training future entrepreneurs through establishing new academic networks and bringing together stakeholders, while leveraging existing supports, as appropriate. It is expected that SFI ARC Hub will foster a culture of innovation and entrepreneurship supported by processes that will operationalise and scale opportunity realisation to deliver transformative new products, processes, and services to market.

MaREI Research Centre for Energy, Climate and Marine Research



MaREI is the Science Foundation Ireland (SFI) Research Centre for Energy, Climate and Marine research and innovation, coordinated by the Environmental Research Institute (ERI) at University College Cork. The Centre comprises over 200 researchers working with over 50 industry partners, focusing on defined global challenges such as the Energy Transition, Climate Action, and the Blue Economy. MaREI delivers excellent research with societal impact by supporting business,

informing policy, and empowering society, resulting in the development of a dynamic research ecosystem that is responsive to the needs of all our stakeholders. As a driver of collaboration, MaREI researchers engage with stakeholders across more than 36 countries and have a proven track record of academic excellence.

IPIC – Research Centre for Photonics (Tyndall National Institute)



IPIC brings together more than 150 researchers from four institutes to develop new light-enabled technologies. Photonics is the generation, manipulation, and use of light. It is a key enabling technology that underpins the internet and drives growth in diverse industries such as the ICT and MedTech sectors, as well as industrial technology which includes both manufacturing and environmental monitoring. The Research Centres' academic Partners include Tyndall National Institute (Cork), Munster Technological University (Cork) Dublin City University, University College

Cork

IPIC's integrated research team has competencies in the theory of novel light-emitting materials through to the design of devices and systems. IPIC can accelerate transfer from laboratory to market by using its advanced fabrication and packaging capabilities to develop concepts and deliver low-volume manufacturing of prototypes.

APC Microbiome Ireland



APC Microbiome Ireland SFI Research Centre located on the campus of University College Cork explores the role that microbes (microbiome) play in health and disease. The microbiome is a target for the prevention and treatment of disease, it is also a source of functional food ingredients, new drugs, and disease biomarkers.

One of the world's leading institutes in gut microbiome research, APC Microbiome Ireland is receiving €80 million in SFI, industry and other non-exchequer funding across 2019-2025. It hosts a diverse group of clinicians and scientists working in teams and sharing ideas and resources. The research centre works with 6 academic partners and over 24 industry partners.

Insight Centre for Data Analytics



Insight is one of the largest data analytics centres in Europe. It creates a critical mass of more than 450 researchers from Ireland's leading ICT clusters. Insight's researchers are based across our four host institutions including University College Cork. It has received over €150+ million in SFI funding and has engaged with over 220 industry partners.

It seeks to derive value from Big Data and provides innovative technology solutions for industry and

society by enabling better decision-making. The research centre supports researchers across areas such as the Fundamentals of Data Science, Sensing and Actuation, Scaling Algorithms, Model Building, Multi Modal Analysis, Data Engineering and Governance, Decision Making and Trustworthy Al.

Their research can be applied across four broad areas:

- Augmented Human
- Smart Enterprise
- Smart Communities
- Sustainability

VistaMilk



VistaMilk is a world leading SFI Research Centre for innovative precision pasturebased dairying. Leading the Agri-Food technology sector through innovation and enhanced sustainability across the dairy supply chain.

VistaMilk The Vistamilk SFI Research Centre represents a unique collaboration between agri-food and ICT Research Institutes and leading Irish/Multinational food and ICT companies and is funded by SFI and the Department of Agriculture Food and the Marine. Cork based VistaMilk partners include Tyndall National Institute, University College Cork, the Agriculture and Food Development Authority (TEAGASC) and the Irish Cattle Breeding Federation (ICBF).

Award criterion 4, Expanding – acting as a role model for other cities by supporting the dissemination and replication of tested solutions that boost the local innovation ecosystem; by promoting mutual learning, knowledge transfer and capacity building; and by enhancing cooperation and synergies between cities that are front-runners in driving the local innovation ecosystem, and those that are still exploring and testing their role as innovation enablers. In this criterion, among others, the applicant should consider answering to the following questions: e.g. What are the activities and initiatives for which the city can be considered a role model for others? How is the city sharing its knowledge with other cities? Is the city cooperating with other cities in the areas of this competition? The applicant is expected to provide details on concrete results of the showcased initiatives

LEARNING FROM EUROPEAN AND GLOBAL LEADERS

Cork City has participated in many European projects and is often the first or only Irish city to partake in these projects paving the way for the learnings and knowledge to be disseminated with other Irish Cities. Cork is twinned with several cities, namely, Cologne, Rennes, Swansea, San Francisco, Shanghai and Coventry. Through this network Cork City Council has engaged in knowledge sharing. One example of this collaboration is where Cork City has engaged with its twin city Shanghai, world leaders in innovation to share knowledge, learn and understand international best practices.

Cork and Shanghai – Innovating Together

Cork City is twinned with Shanghai since 2005 and collaborates with them on several areas including Local Government, Education, Health, Art & Culture and Innovation and Enterprise, the latter being included specifically as a theme in the renewed Memorandum of Understanding in 2017.

In 2018 Cork City Council engaged in a benchmarking exercise with Shanghai Municipal Government and its agency, the Shanghai Institute for Science of Sciences (SISS), to exchange innovation best practices. This culminated in a report which compared the two cities (and Ireland) along several innovation criteria, and which was presented to the prestigious international Pujiang Innovation Forum in Shanghai in 2018 where cites from all over the globe presented on innovation initiatives in their cities.

This report was the first time the city attempted to measure its innovation. The research paper was to be based on a report produced by SISS– the Shanghai Science & Technology Innovation Center Index Report. In this report, SISS used five main criteria taken from the Organisation for Economic Co-operation and Development (OECD) report Competitive Cities in the Global Economy to create a model against which to measure the Shanghai innovation ecosystem.

Our research team utilised the same criteria and, where applicable, add additional ecosystem measurement criteria. The approaches to innovation-driven policies, initiatives and endeavours across both jurisdictions differ fundamentally. All cities in China are ranked according to well-understood innovation criteria and Shanghai is no exception. The research paper took the SISS 2016 category framework and applied it to Cork. Despite significant differences in the innovative landscape between the

two cities the results of the pioneering research which appears in this report have proved extremely worthwhile. The results have not only highlighted contrasted approaches to innovation, suggesting possible transfers of good practice but also add to the literature on innovative cities.

This was followed by a further presentation on the new Planning system in Cork and Ireland in 2019 and following a break due to covid, we expect that Tyndall with make a presentation to the Forum this September 2023 on the economic impact from their global RDI in ICT, photonics and nanotechnologies.

EU Projects

Since 2016, Cork City Council has successfully competed to be involved in 41 separate EU projects or focused community of practice initiatives – bringing organisations across Europe together to address issues of common concern. This pooling of knowledge and hands-on experience with likeminded entities on how shared challenges are handled in different contexts, or could better be addressed, is enabling us to significantly broaden our horizons through peer learning and to be part of joint efforts to devise practical solutions that break new ground and raise our own standards of service delivery. This engagement has allowed Cork City Council to incorporate aspects of innovation not only in improving service delivery but in other areas of City Development also. For example, trialing the deployment of new technologies as a demonstration testbed or living lab facility in conjunction with research organisations.





Among the added value outcomes and innovations arising from our EU projects are:

- The Shape Your City voter registration campaign aimed at integrating newly arrived members of the immigrant community into Cork civic life and the democratic process ahead of the most recent Local & European Elections (Atlantic Social Lab).
- The city's first Digital Strategy as the policy driver to deploy technology, data, and digital tools as enablers towards the development of a smart, sustainable, and inclusive 'connected city' where the digital transformation founded on skills building, connected services, empowered public use of Open Data and best-in-class infrastructure will enhance the quality of life of our citizens and promote economic development (Digital Cities Challenge and Intelligent Cities Challenge);
- The use of play and games, in an intergenerational sense, as innovative vehicles by which to deliver multiple social inclusion, healthy lifestyle (Cork is a WHO healthy City), active ageing and urban placemaking outcomes including the pedestrianization of a riverside traffic route into a recreational amenity for the community (Playful Paradigm);
- A Green & Blue Infrastructure Study which has served as a key component of the 2022-2028 City Development Plan in emphasizing a future prioritization of nature-based solutions over hard engineering and on providing connectivity to benefit biodiversity (Urban Agenda);
- The Home Energy UpGrade Office (HEUGO) the first city centre public advisory facility of its kind in Ireland, offering free and independent guidance to citizens on domestic energy efficiency and retrofitting options, in both technical and financial (grants) terms (INTENSIFY

	and UP-STAIRS);	
٠	The STAMP ("Cork empowering creativitycreativity empowering Cork") brand identity, cluster and annual festival – a grassroots initiative which has mobilised four separate arts, design and crafts organisations and their membership of creators to better make their mark on the city in terms of visibility and economic significance (Cult-CreaTE).	
•	Increasingly, our project portfolio focuses on activity of direct relevance to Climate Action: stakeholder engagement (REACHOUT and UP-STAIRS – both Horizon 2020; INTENSIFY - Interreg Europe); nature-based solutions (Urban Agenda for the EU – Partnership on Sustainable Land-Use –); energy technology in social housing (RED WoLF – Interreg North West Europe; MINISTOR – Horizon 2020); Smart Cities (GrowSmarter – Horizon Europe; Digital Cities Challenge and Intelligent Cities Challenge – both COSME); brownfield regeneration (ENSURE – ESPON).	
٠	The most multi-dimensional of these initiatives reconcile the high-level objectives of creating a smart, green and socially inclusive city:	
0	The Climate-Neutral & Smart Cities Mission is set to revolutionise how our city functions by accelerating the journey to net zero carbon status by a full generation, while developing a whole-of-city coalition movement based on solid commitments to action and serving as an innovation testbed and an inspiration for other cities.	
٠	Intelligent Cities Challenge has delivered citizen-facing advanced technologies to enable better urban placemaking and age-friendly service support.	
•	Growsmarter has embedded smart city approaches to benefit's Cork's population, from building shell refurbishment to energy management systems to multi-modal transport hub development.	
٠	UNIC is redefining how the City Council and one of our universities (UCC) jointly drive societal change in the city by using the lens of social inclusion and climate action to mutually generate engaged research tools and solutions responding to specific civic/community challenges (Cork is a UNESCO Learning City);	
•	REACHOUT is bridging the gap between climate science and stakeholders (civil society, communities, and businesses) by making technical tools in support of urban resilience such as flood hazard management understandable and accessible, thereby both informing and broadening inputs into planning and decision-making on adaptation measures and infrastructure; and	
Outside of formal project structures and timelines, Cork City's approach is very much informed by being well connected at European and International level through active engagement with thematic networks of interests such as ICLEI (local governments for sustainability) and Atlantic Cities. Cork City Council is ready and willing to share any knowledge, outcomes and findings from any of the EU projects we are		

Shared Island Initiative with Belfast City Council

Cork City Council is working collaboratively with Belfast City Council on two innovative projects as part of the Shared Island Initiative. We both have shared goals in relation to docklands regeneration and climate action planning. Consultants have been appointed to work with both local authorities on common challenges and opportunities in relation to enhancing the connectivity between both city centres and their respective docklands areas as well as the potential of rooftop solar PV in each city.

ISAC for Cities (I4C+)

involved in.



Cork City Council is a founding member of an international Cybersecurity ISAC (Information and Analysis Center) for Cities called I4C+. This ISAC's members are CIOs/CISOs of cities exchanging personal sensitive knowledge to improve their individual and collective cyber resilience. The "+" highlights that this is a "high touch, low tech" group that trusts each other deeply enough to share even TLP RED information and knowledge.

The vision of I4C+ is to create a critical mass of cities pro-actively collaborating in sharing sensitive personal knowledge on cyber safety more rapidly, more widely and more intensively than is currently the case. The mission of I4C+ is to significantly reduce the probability and impact of cyber-attacks. The goal of I4C+ is to support the more effective and sustainable implementation of digital solutions for citizens

Members of I4C+ primarily exchange knowledge:

- Concerning cyber-breaches and how they were resolved,
- Concerning cyber security solutions used and practical experience with these.
- Concerning their cyber strategies and how these are implemented,
- "Question & Answer" knowledge, whereby questioners are expected to summarize and share back answers received, and
- Good practice. I4C+ provides regular reports on progress to members and stakeholders.

The group also undertakes simulations of cyber events with its members which encourages cities to work together as part of an international tabletop exercise.I4C+ is supported by the EU Agency for Cybersecurity (ENISA) and the EU Project "Empowering EU-ISACs".

All Ireland Smart Cities Forum



Cork City Council is a founding member of the All-Ireland Smart Cities Forum. The All-Ireland Smart Cities Forum is a community of practice focused on the advancement of cities in both the Republic of Ireland and Northern Ireland. The participating cities include Cork, Waterford, Limerick, Galway, Dublin, Newry, Belfast, and Derry through the deployment of, and value creation generated by smart city programmes.

The Forum is made up of city officials who have a wealth of knowledge and experience of the evolving smart city agenda, and the opportunities this provides for future growth and investment. The primary objective is that the forum is a cooperative forum for the advancement of smart city agendas across all partner cities. The working group is looking at identifying best practice citizen engagement activities that can be shared and replicated. The working group hopes to identify collaborative projects in this area with other cities in Ireland which are represented on the forum.

Open and Agile Smart Cities

Cork City Council is a member of international groups such as Open and Agile Smart Cities and the Major Cities of Europe.

Award criterion 5, City innovative vision – applicants should demonstrate their long-term strategic vision/plan, highlighting the innovative initiatives that have positively contributed to the transformation of the city and which will further support the development of a sustainable and resilient innovation ecosystem ensuring the green and digital transitions. In this criterion, among others, the applicant should consider answering to these questions: e.g., what was the "point of departure" of the city and what has been achieved by now? What does the city want to achieve, and which are the tangible actions already taken or put in place to get to those objectives? The applicant is expected to provide details on concrete results of the showcased initiatives. Moreover, the applicant is invited to provide information on how all showcased activities follow the innovative vision/strategy.

Cork City's long-term strategic vision is to become an innovative, sustainable, and climate-neutral city and take its place as a top-class European city which offers an excellent quality of life for its citizens. Cork City understands that on this journey, new problems of a larger scale and complexity will present themselves which will require creative innovative solutions and therefore innovation will have a vital role to play in our city's future.

The process of achieving these goals has already begun with the implementation of Cork City's Climate Adaptation, Air Quality and Digital Strategies and our participation in the EU's 100 Climate Neutral and Smart Cities. Within these strategies, there have been many innovative ideas, concepts and processes introduced which are driving the green and digital transition. By building on the leanings and outcomes of these initiatives Cork City aims to become a national test bed for innovative ideas, concepts and processes which can contribute to not only Cork City's development but also Ireland's development.

For Cork City to effectively innovate there must be an innovative eco-system which connects all the relevant innovative stakeholders. Cork City aims to build a highly collaborative ecosystem by building on the progress which has been made by implementing public consultations to inform City strategies, creating industry cluster representative groups such as Cyber Ireland and Tech Industry Alliance to connect industry, the public sector and academia leaders to disseminate knowledge.

At the centre of this ecosystem will be Cork City's citizens. Cork City has realised that citizen engagement is of huge importance and that citizen-led bottom-up approaches are the way forward. Cork City will continually identify new ways to encourage citizens in development and innovation and unlock the potential of our people. Initiatives such as Cork City Councils Community Climate Action and the extensive Local Economic Community Plan consultation have laid the foundations as examples of best EU Prizes: Application form (prizes) The European Capital of Innovation Awards: V1.0 - 08.03.2023

practice and these frameworks will be brought forward and integrated in all future planning for Cork City.

Cork City has greatly benefitted from participating in European Projects which have allowed for learning and the dissemination of knowledge from our European counterparts. Cork City understands the importance of sharing learnings and helping others. As Cork City continues to innovate and act as a test bed, we will continue to build on the strengths of our highly innovative ecosystem and drive the digital and green transition. Cork will collaborate and share the learnings taken from its journey to date with other Irish cities to accelerate their development and contribute to Ireland's development. It is this mindset which facilitates Cork City to have a big impact both locally, nationally, and internationally.

3. OTHER

3.1 Ethics

Ethics

Describe ethics issues linked to your application (if any) and the measures you took/intend to take to solve/avoid them.

N/A

3.2 Security

Security

Describe security issues linked to your application (if any) and the measures you took/intend to take to solve/avoid them.

Indicate if any of the information is/should be EU-classified (Decision 2015/444).

N/A

4. DECLARATIONS

Double funding			
Information concerning other prizes for this project Please note that there is a strict prohibition of double funding from the EU budget (except under EU Synergies calls). Applications that have already received an EU prize cannot receive a second prize for the same activities	YES/NO (If NO, add details)		
We confirm that to our best knowledge neither the application as a whole nor any parts of it have benefitted from any other EU prize.	Yes		
We confirm that to our best knowledge neither the application as a whole nor any parts of it are (nor will be) submitted for any other EU prize.	Yes		
Admissibility self-declaration			
Has the endorsement to apply to this competition been signed by the city's Mayor or the equivalent highest political representative? Please remember that only endorsements signed at that level of representation will be accepted.	Yes		

EU Prizes: Application form (prizes) The European Capital of Innovation Awards: V1.0 - 08.03.2023

ANNEXES

LIST OF ANNEXES

The only mandatory annex is the city Mayor's (or highest political equivalent) endorsement. (Max 2 pages) It should be uploaded separately in the system.

HISTORY OF CHANGES				
VERSION	PUBLICATION DATE	CHANGE		
1.0	08.03.2023	Initial version (new MFF).		

1. Cork City Mayor Letter of Endorsement (uploaded separately)



Comhairle Cathrach Chorcaí Cork City Council

Seomra an Ardmhéara, Halla na Cathrach, Corcaigh, T12 T997 Lord Mayor's Room, City Hall, Cork, T12 T997

European Innovation Council European Commission Brussels

RE: Rising Innovative City

29 June 2023

To whom it concerns,

As Lord Mayor of Cork City, I fully endorse Cork City Council's submission on behalf of the City to partake in the "Rising Innovative City" category of the European Capital of Innovation Awards (ICapital).

Cork City is Ireland's second largest and fastest growing city set to experience rapid population growth as the city's population is earmarked to grow from 222,333 to 350,000 people by 2040. As the city grows, significant challenges will present themselves particularly around climate change and sustainable development. As the city grows, we must ensure that innovation is one of our greatest tools to discover solutions to these problems.

Innovation is in Cork's DNA: it permeates everything we do. As a city we constantly seek new opportunities to learn and test new waters. This mindset will be vital if we are to achieve climate neutrality as part of the EU 100 Cities Climate Neutral and Smart Cities Mission

This award presents an excellent opportunity for Cork City to showcase the breadth of Innovation happening in our city and Cork City's journey to date and shine a spotlight on some of the excellent work happening and which is having positive impacts at a local and national level.

Partaking is this award process also serves as an opportunity to benchmark Cork City against our European counterparts and identify areas to learn, improve and develop. If Cork City is successful in winning the competition or placing within the top three, this would significantly raise Cork City's profile on the European stage while the monetary prize would greatly benefit Cork City's local innovation eco-system.

Yours Sincerely,

CLL'R. KIERAN MCCARTHY ARDMHÉARA CHORCAÍ LORD MAYOR OF CORK



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