

INSPIRING BUSINESSES IN DUBLIN'S ENERGY TRANSITION



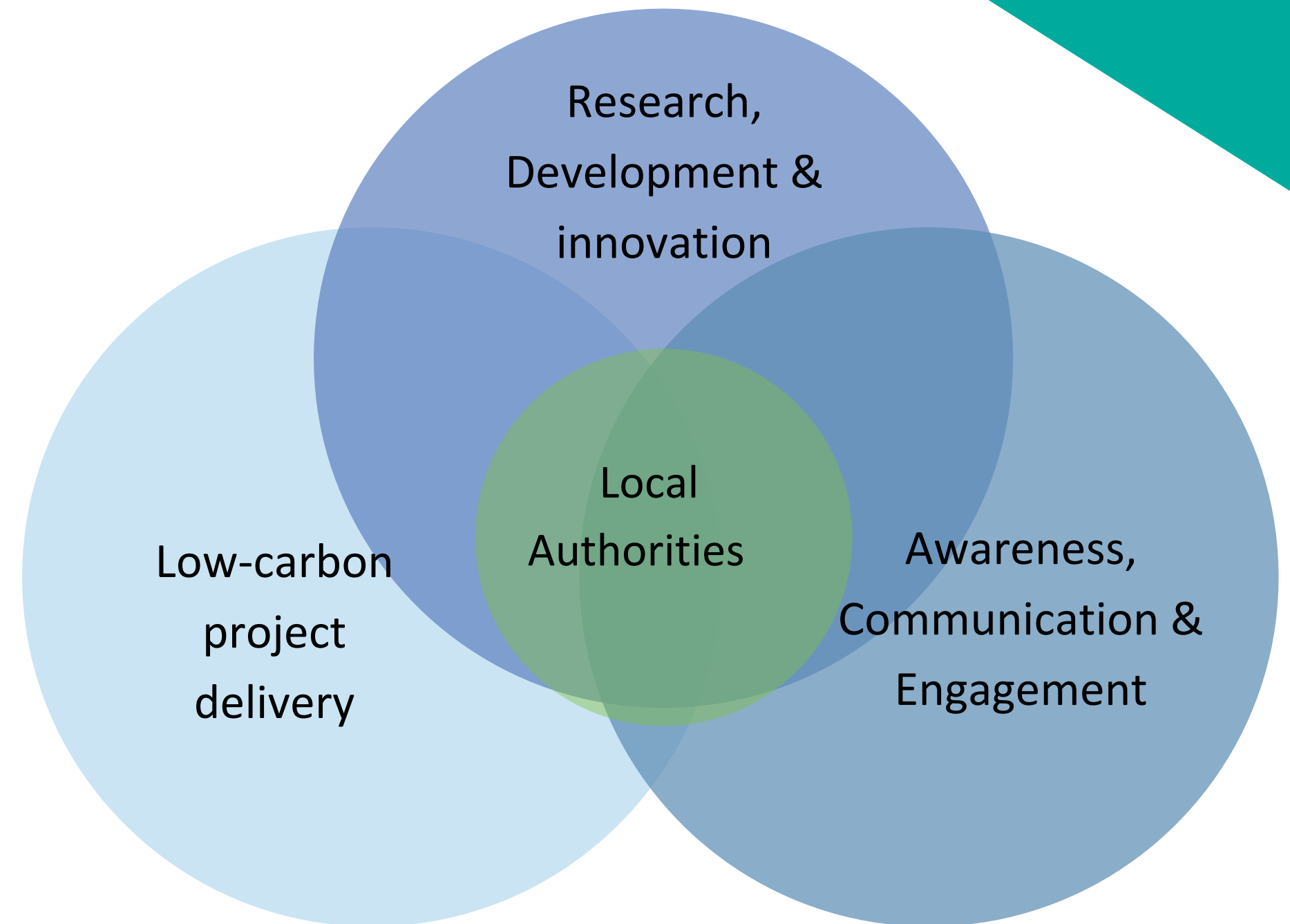
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WHO ARE WE?



Our mission is to **accelerate Dublin's low-carbon transition** through a range of service areas including innovative, local-level energy and climate change research, planning, engagement and project delivery, in order to **mitigate the effects of climate change and improve the lives of citizens.**



EXAMPLES OF OUR WORK

Project Delivery

Project
Implementation

Research Development &
Innovation

Energy Monitoring &
Management

Management
Support

Energy Awareness &
Engagement



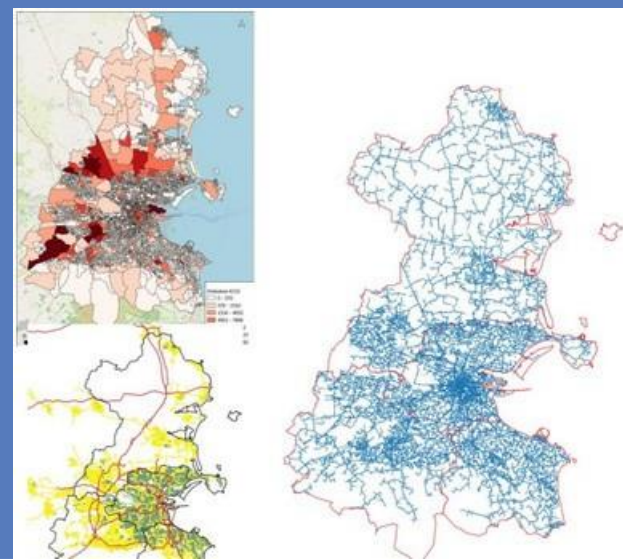
WHAT IS ZERO TOGETHER?

Zero Together is an initiative with the ultimate aim of creating and supporting the delivery of a **vision and a strategy for the whole of Dublin** to ensure we meet our 2030 and 2050 emission-reduction targets.

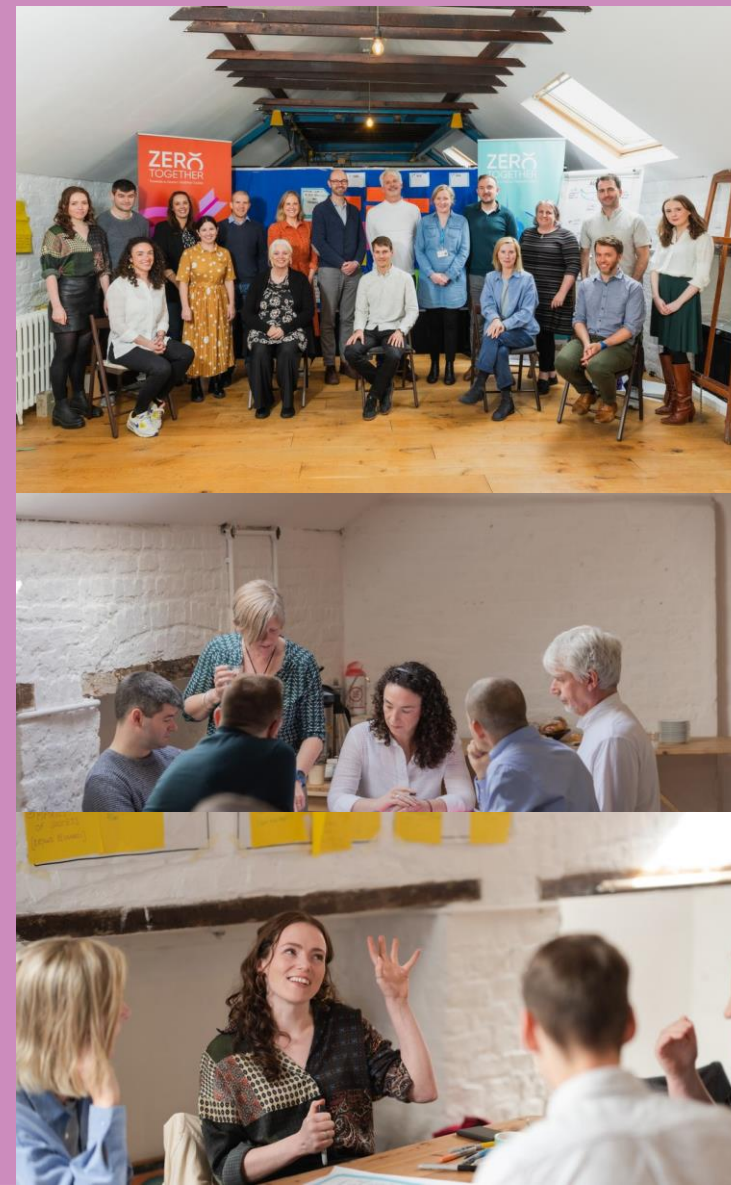


ZERO TOGETHER IS GROUNDED IN THREE CORE ELEMENTS

1. Evidence-base and best available information & science



2. Collaboration from range of sectors across Dublin



3. Public participation & engagement with the people of Dublin



POSTCARDS FROM DUBLIN 2050

WHAT IS YOUR VISION OF DUBLIN FREE FROM FOSSIL FUELS?

We are inviting you to send a message from the future in the form of a postcard.
In your ideal world, what would Dublin look and feel like in 2050? We are not asking for solutions.
We simply want to know what our capital would look like if we were to succeed and what YOU imagine it to be?

ZERO TOGETHER
Towards a cleaner, healthier Dublin



Evidence-base

Dublin Regional Energy Master Plan

- First of its kind in Ireland- building upon international best practice
- Cost-optimal pathways to 2030 and 2050 targets
- Holistic integrated energy model look at all energy sectors and considering local technical constraints
- Spatially-led digital twin of the local energy landscape providing an evidence base for informing policy and infrastructure planning
- Considers the wider social and economic impacts



Collaboration with
a range of sectors

Transition Team



SINÉAD CANNY
Systra

PJ RUDDEN
Aengus Consulting

VALERY MOLAY
NYCI

DAVID DODD
Dublin CARO

CIARÁN MURPHY
Codema

THERESA O'DONOHUE
Climate Care

ALI SHERIDAN
Sustainability Consultant

DIARMUID TORNEY
School of Law & Governance DCU

SABRINA DEKKER
Dublin City Council

DONNA GARTLAND
Codema

YVONNE CANNON
Dublin CARO

EOIN AHERN
Codema

FIONNGHUALA RYAN
South Dublin County Council

ANTHONY MCNAMARA
DLR County Council

YVONNE PEARSE
Smart Dublin

CLARE O'CONNOR
Friends of the Earth

KATIE HARRINGTON
Codema

RONAN O'REILLY
Fingal County Council

ALAN MURPHY
Smart Dublin

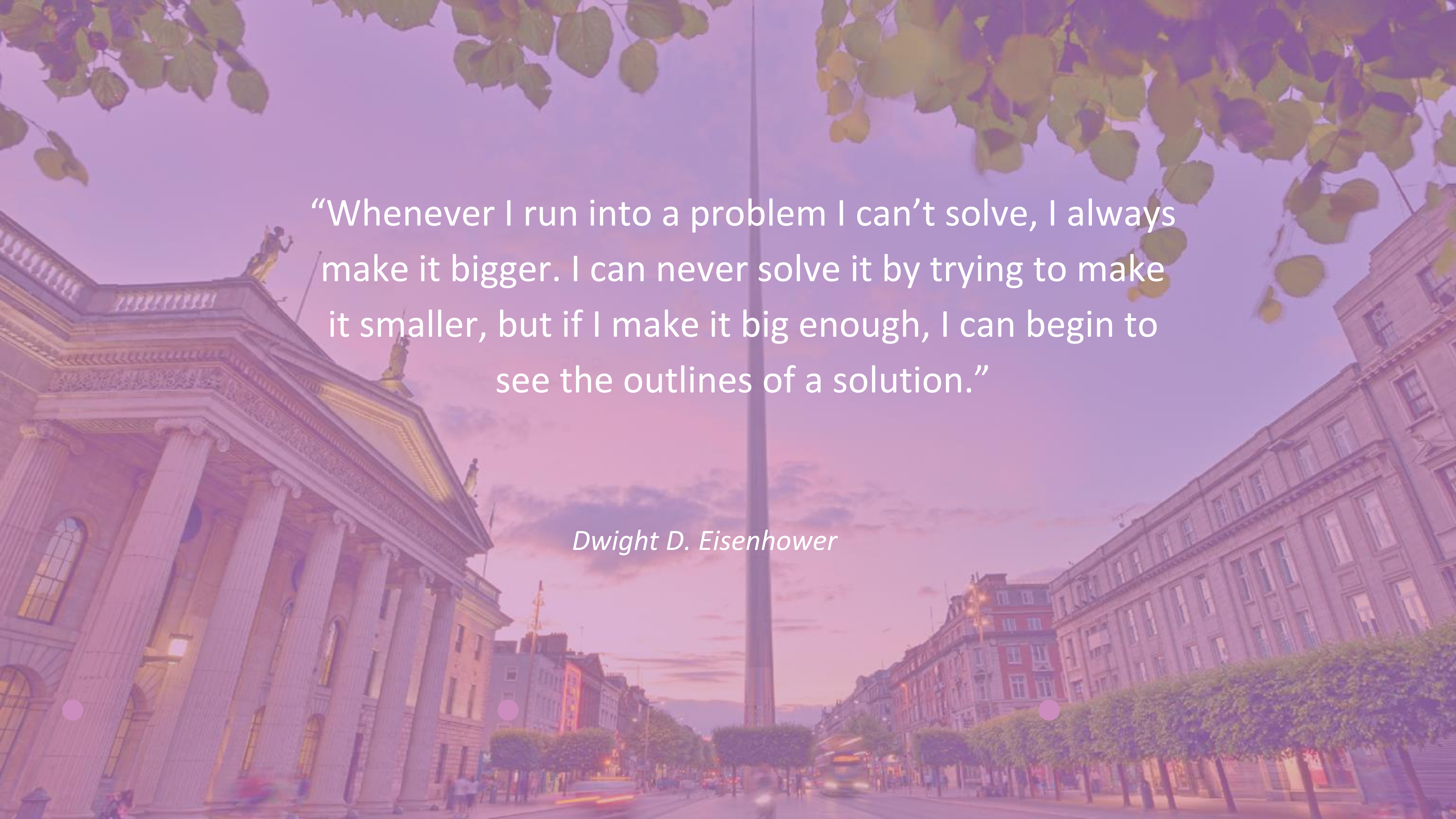
GAVIN HARTE
Sustainability Consultant

SUZANNE FITZPATRICK
Codema

DAVID CONNELLY
IrDEA

The Zero Together Transition Team is:

- Made up of 24 people from a broad range of sectors such as academia, transport, local authorities and community.
- A group of intrinsically motivated individuals dedicating their time to determining the best pathways for Dublin to meet 2030 and 2050 climate targets
- Engaged in 8 facilitated workshops to develop a vision for Dublin, discussing the barriers to this vision and deliberating on the best pathways forward.

A photograph of a city street at dusk. On the left is a large, classical-style building with many columns. In the distance, a tall, thin monument stands against a purple and orange sky. Trees with green and yellow leaves are visible in the foreground. The image has a purple tint.

“Whenever I run into a problem I can’t solve, I always make it bigger. I can never solve it by trying to make it smaller, but if I make it big enough, I can begin to see the outlines of a solution.”

Dwight D. Eisenhower

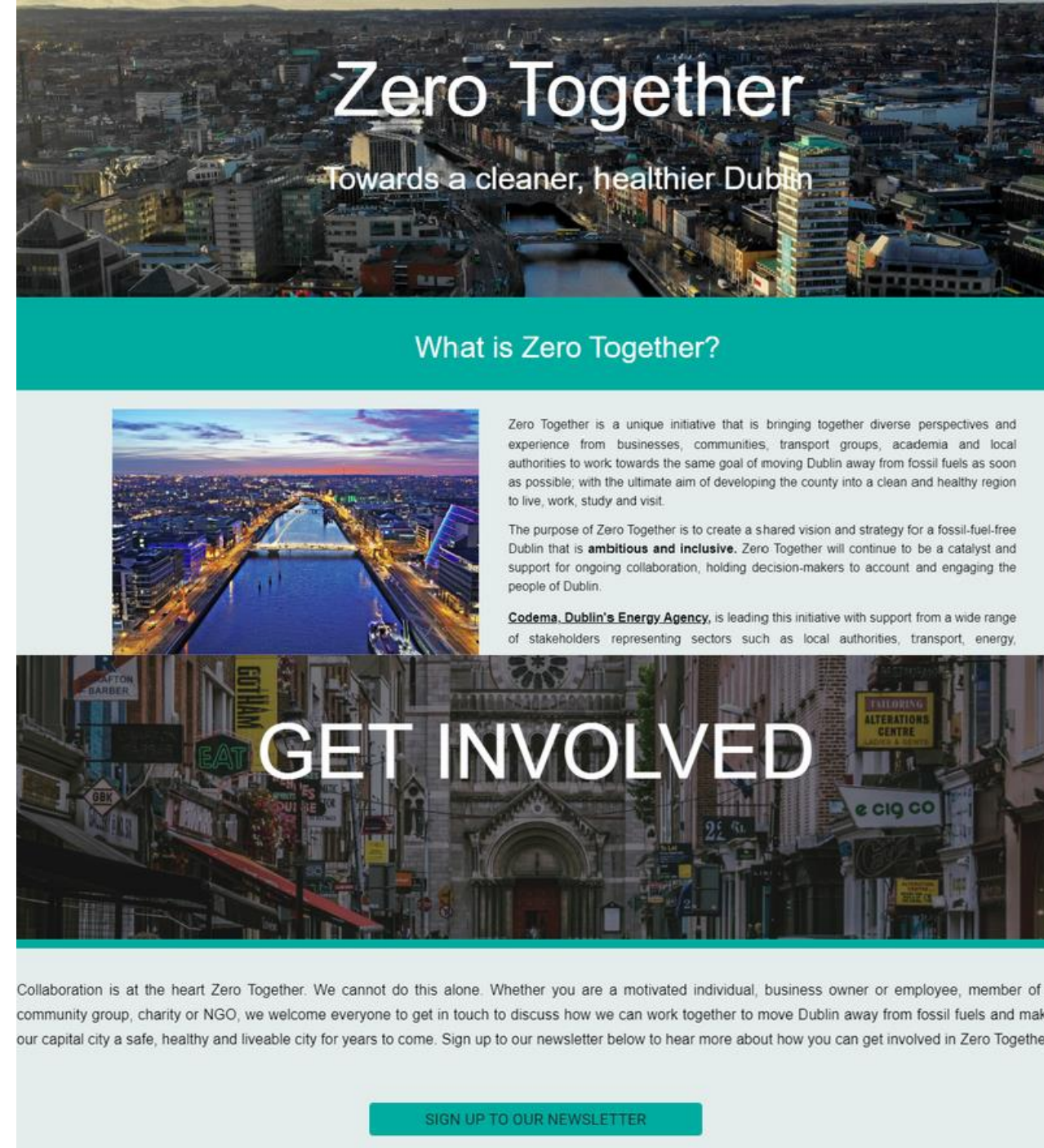
Public Participation & Engagement

...so far!

Launched a Zero Together survey to get the public's views on how we can move Dublin away from fossil fuels.

Over 1k people responded to this survey.

Campaign to create a shared vision of Dublin in 2050 and exploring the viability and logistics of conducting a mini-public on Dublin's energy transition.



Zero Together
Towards a cleaner, healthier Dublin

What is Zero Together?

Zero Together is a unique initiative that is bringing together diverse perspectives and experience from businesses, communities, transport groups, academia and local authorities to work towards the same goal of moving Dublin away from fossil fuels as soon as possible, with the ultimate aim of developing the county into a clean and healthy region to live, work, study and visit.

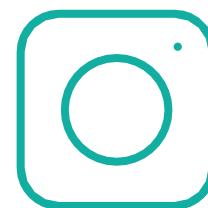
The purpose of Zero Together is to create a shared vision and strategy for a fossil-fuel-free Dublin that is **ambitious and inclusive**. Zero Together will continue to be a catalyst and support for ongoing collaboration, holding decision-makers to account and engaging the people of Dublin.

Codema, Dublin's Energy Agency, is leading this initiative with support from a wide range of stakeholders representing sectors such as local authorities, transport, energy,

GET INVOLVED

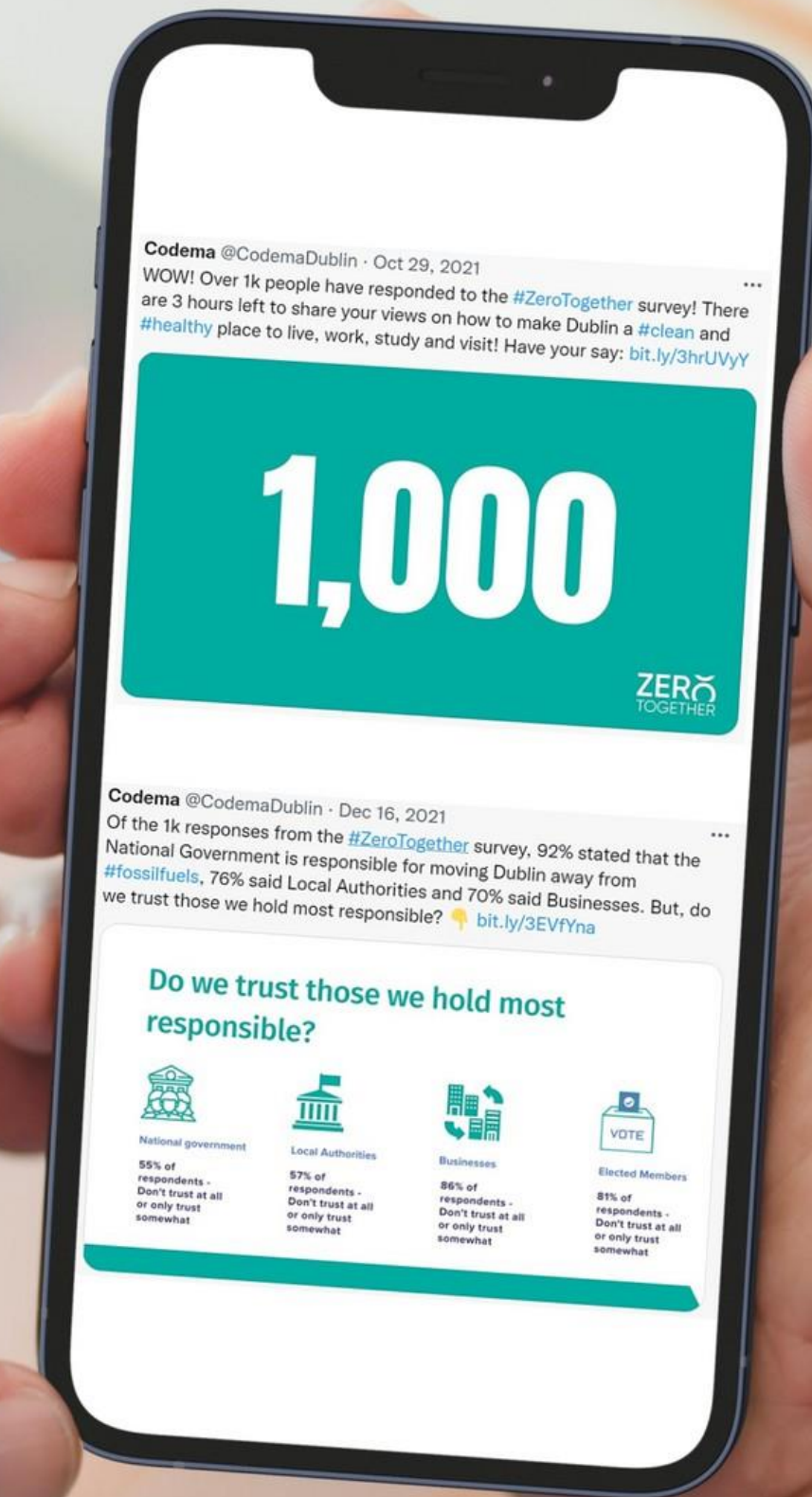
Collaboration is at the heart Zero Together. We cannot do this alone. Whether you are a motivated individual, business owner or employee, member of a community group, charity or NGO, we welcome everyone to get in touch to discuss how we can work together to move Dublin away from fossil fuels and make our capital city a safe, healthy and liveable city for years to come. Sign up to our newsletter below to hear more about how you can get involved in Zero Together.

[SIGN UP TO OUR NEWSLETTER](#)



@Zero_Together

#ZeroTogetherDublin

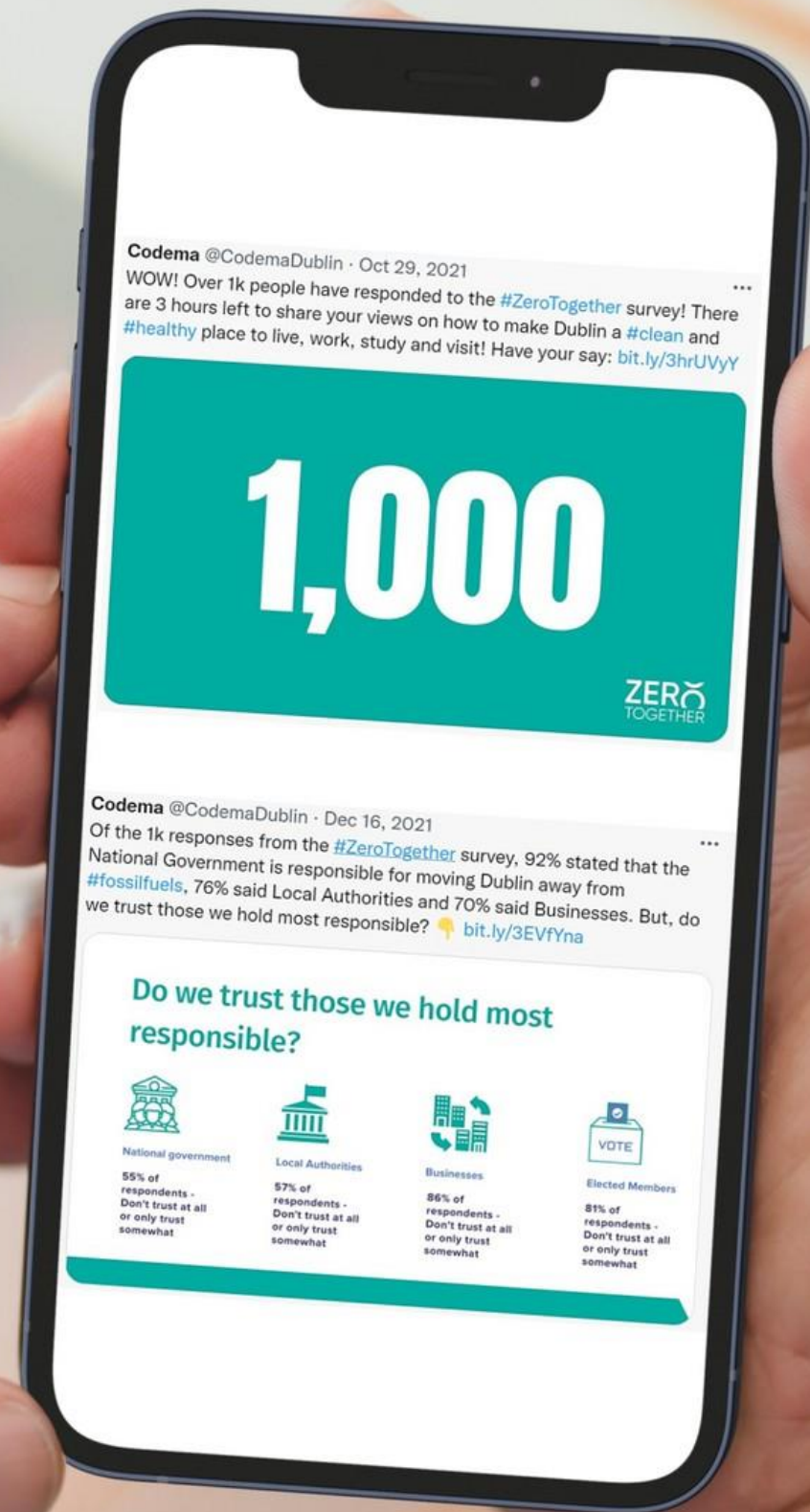


Public Participation & Engagement

...so far!

71 % of respondents said that they feel that their voices are rarely or never taken into account in how we use and produce energy in Dublin.

69% said they would like to have the opportunity to deliberate, propose and vote on recommendations to the local and national government



Public
Participation &
Engagement

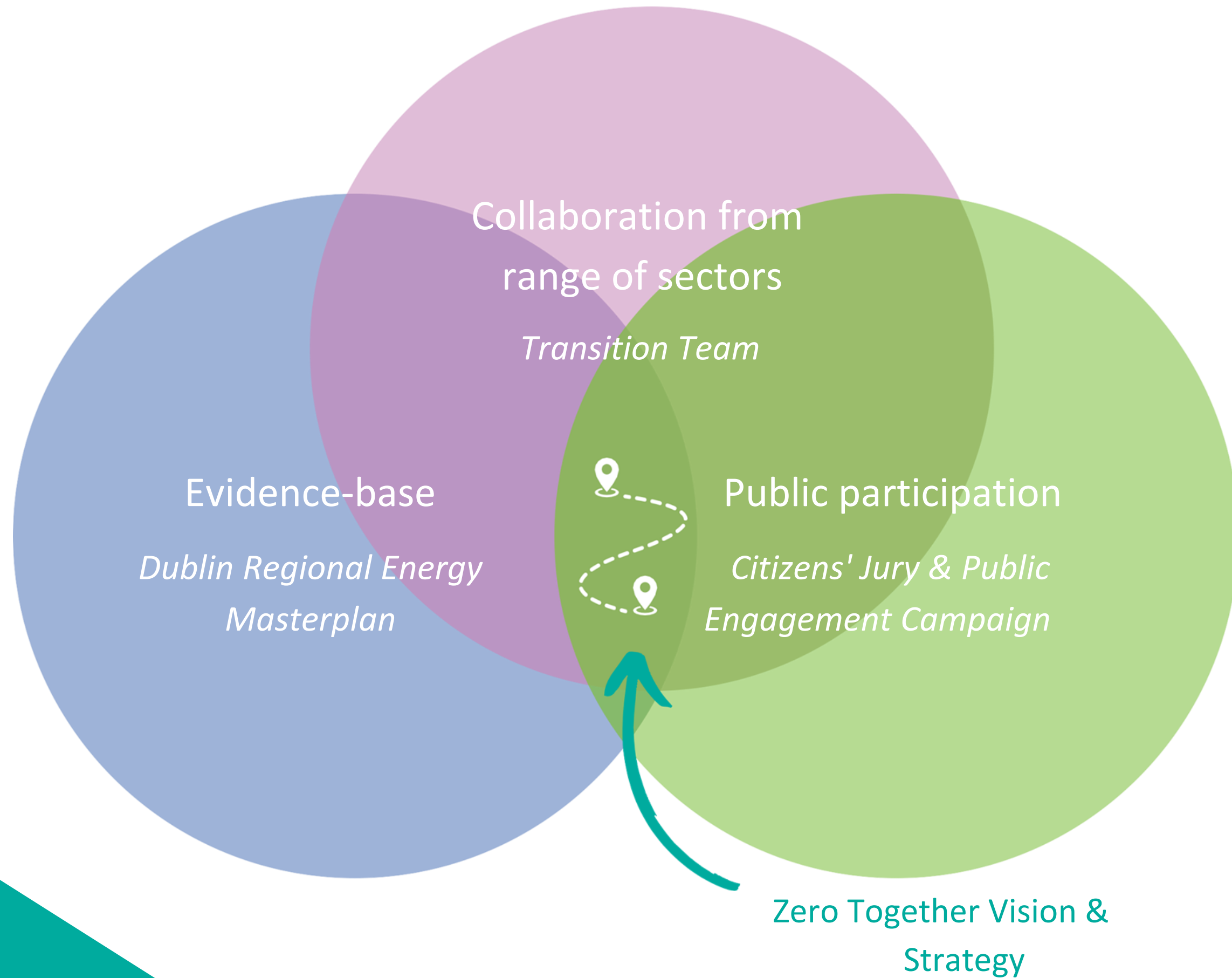
...so far!

Implementation plan for a local
mini-public



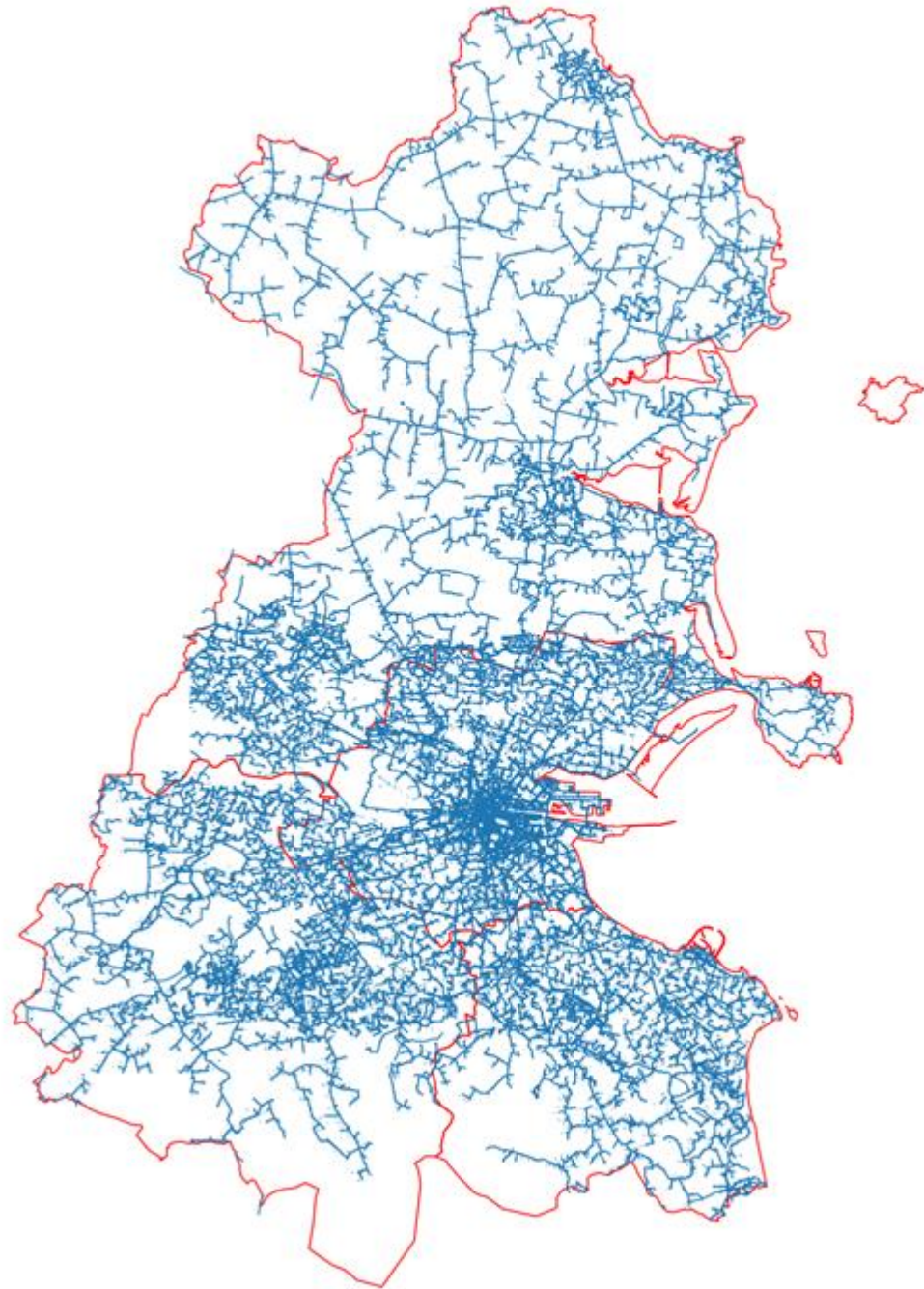
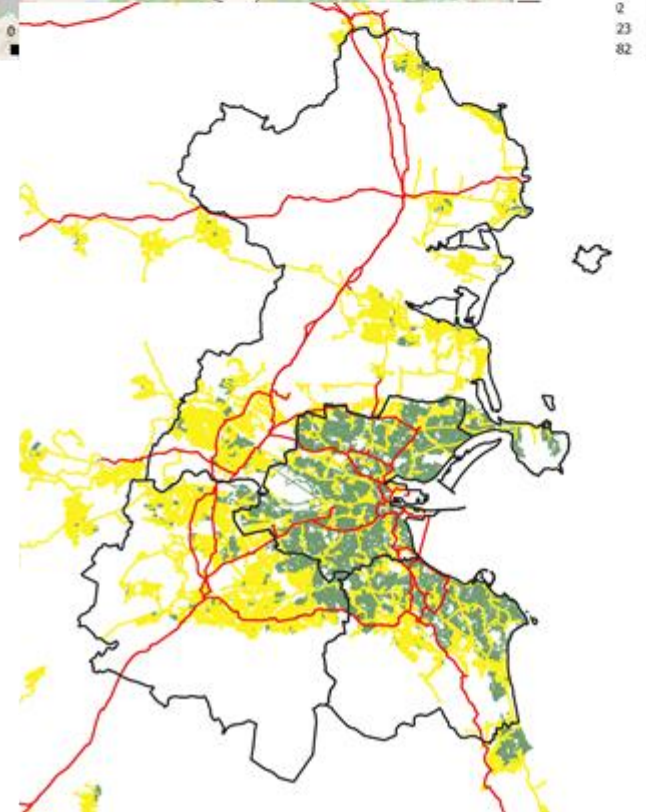
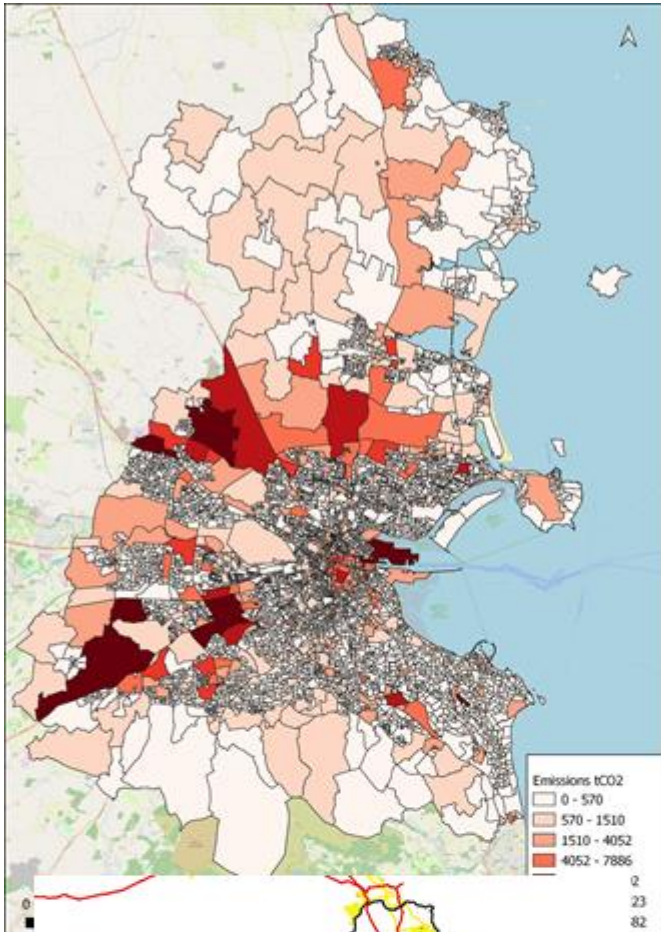
Campaign to build shared
vision with people of Dublin





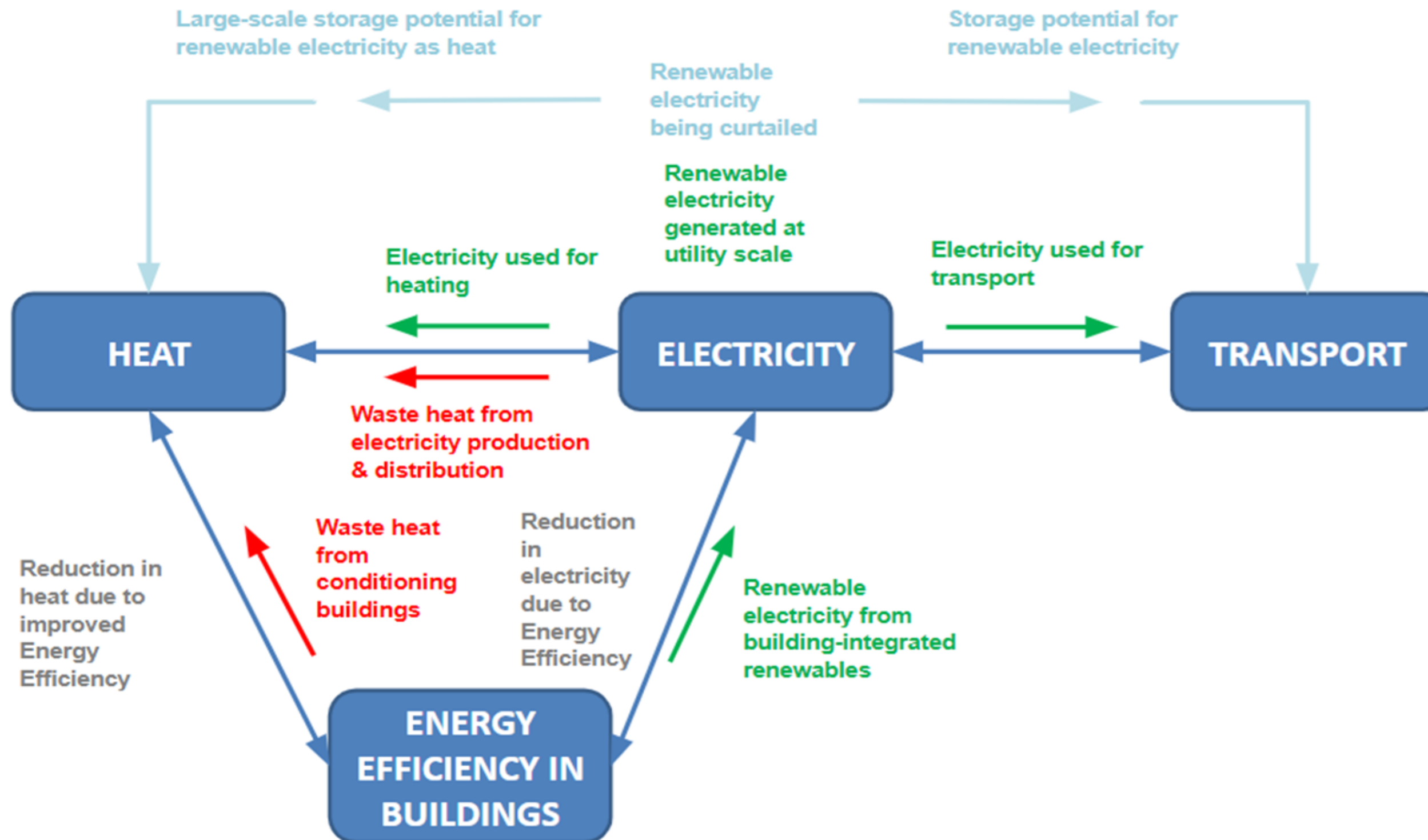
The Dublin Region Energy Masterplan

Dublin Regional Energy Masterplan

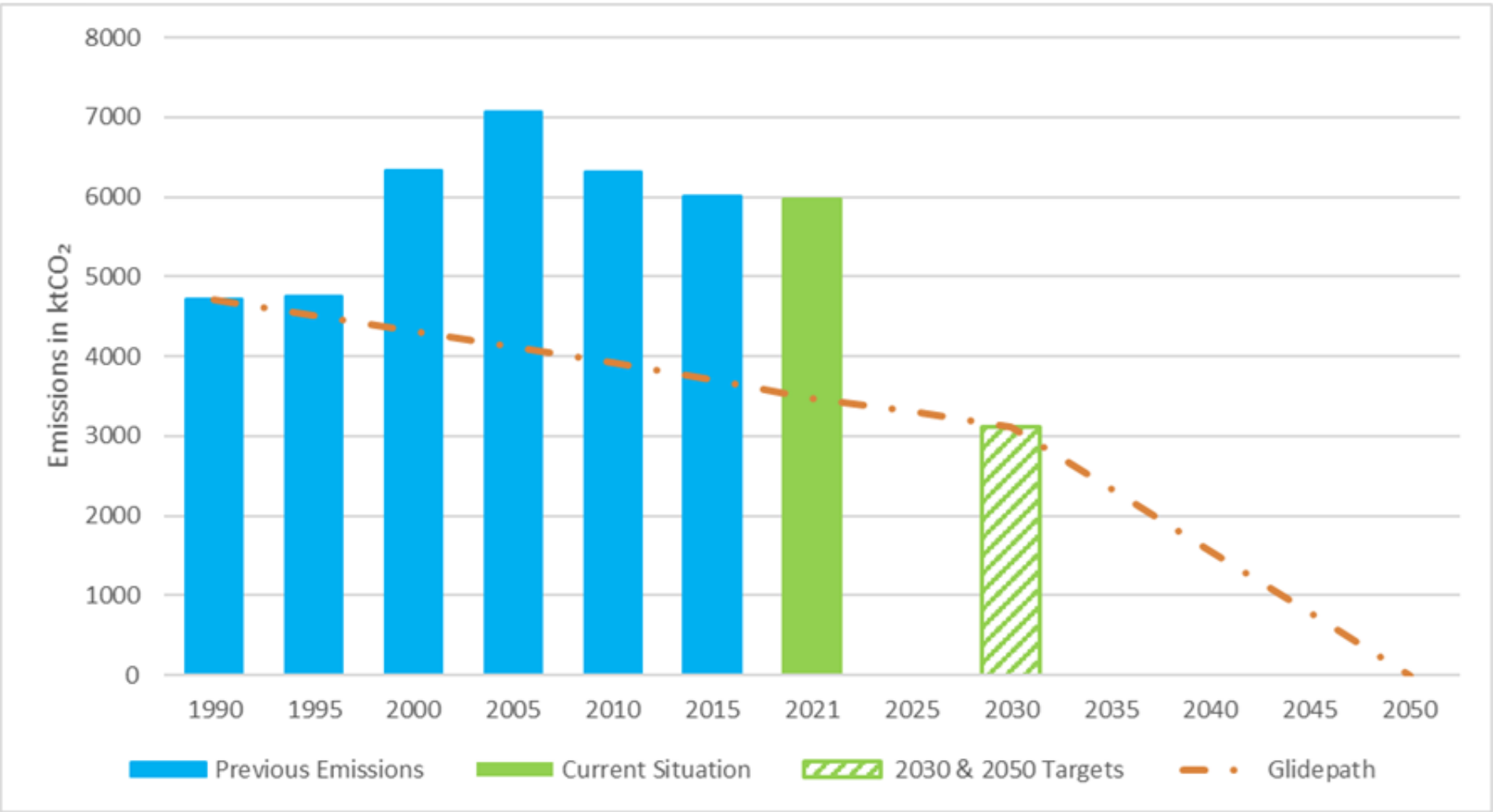
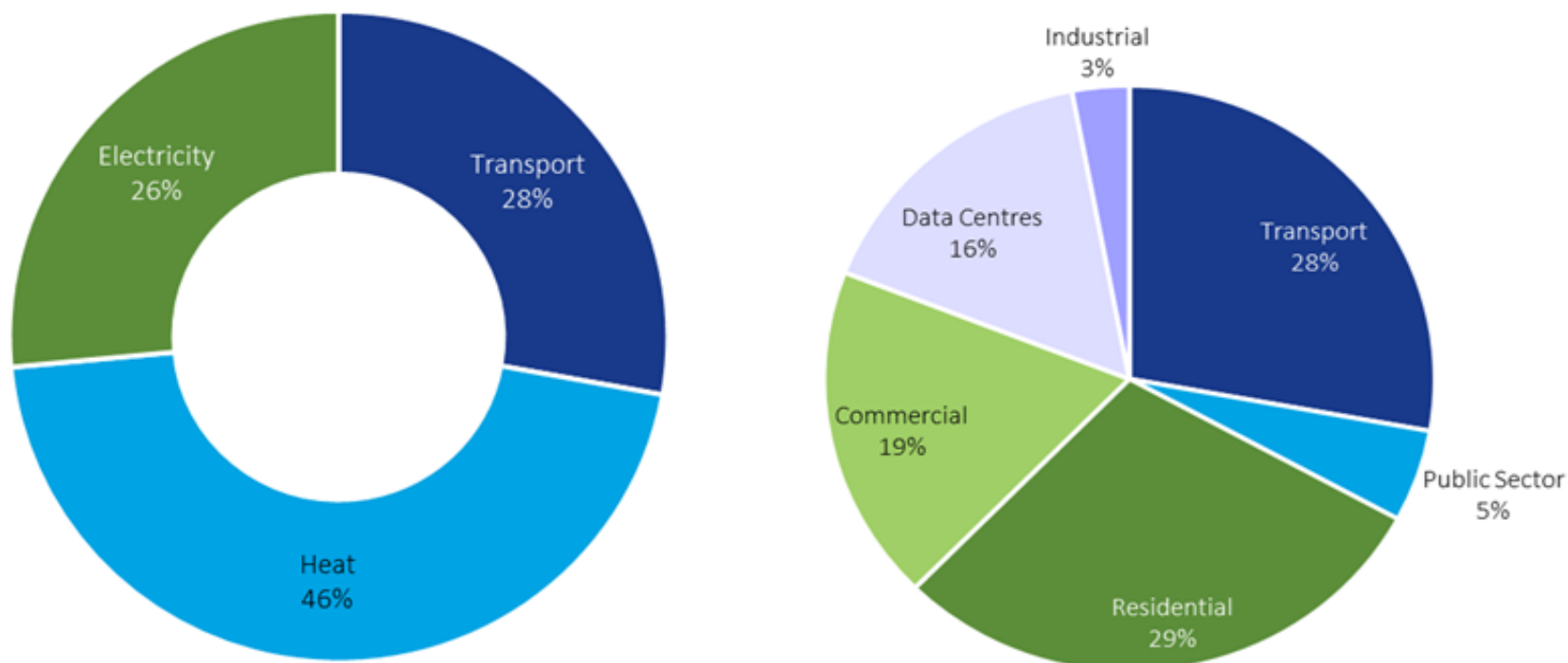


- **First of its kind** in Ireland – building upon best international practice, example for other regions in Ireland to follow
- **Cost-optimal** pathway to 2030 and 2050 targets
- Holistic **integrated energy model** looking **ALL** energy sectors (heat, transport and electricity) and considering **local technical constraints**
- Digital twin of the **local** energy landscape – **evidence base** for informing policy & infrastructure planning
- **Spatially-led** (topographical & spatial constraints included)
- Also considers the wider **social & economic** impacts

Masterplan Overview



Where Are We Now?



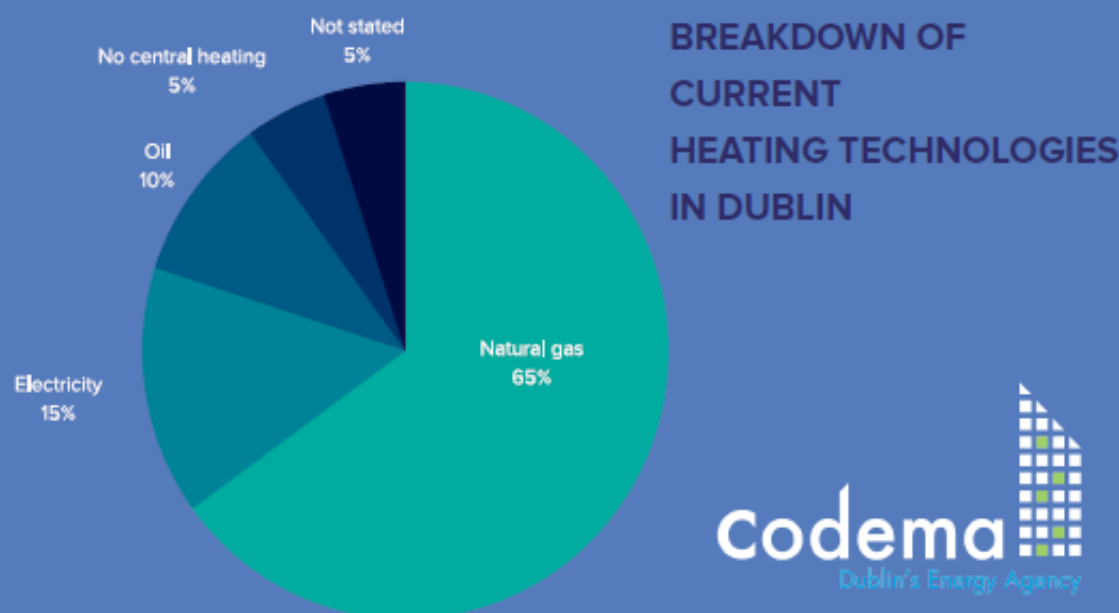
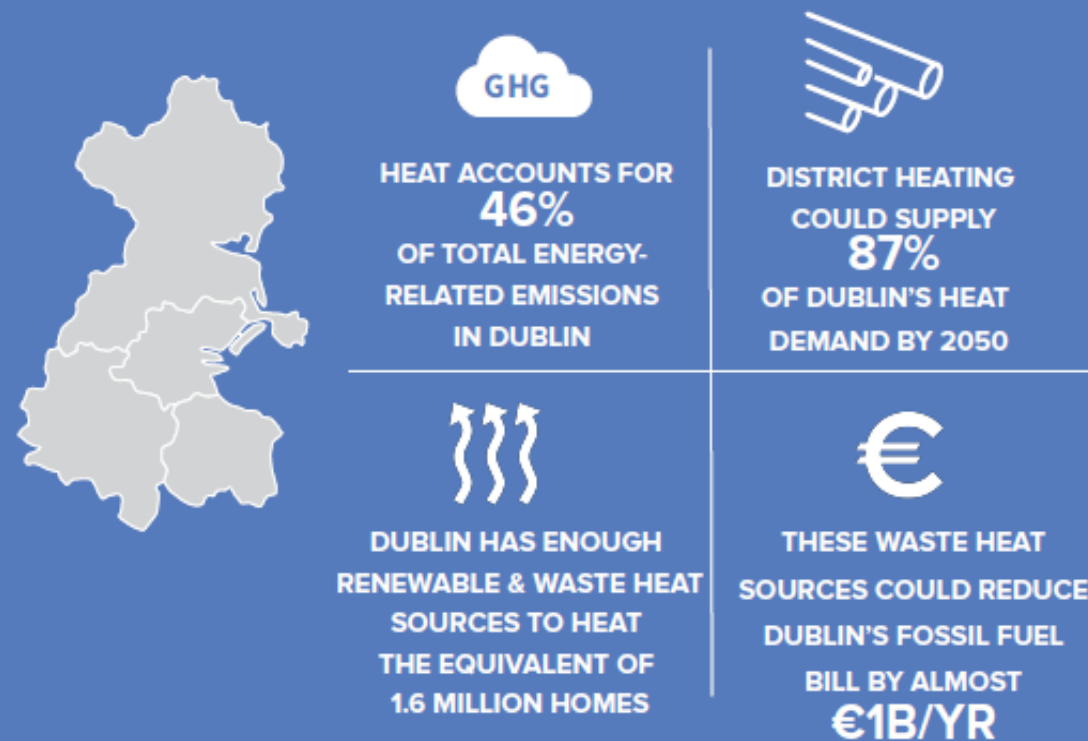
Heat accounts for
46%
of total energy-related
emissions in Dublin

57%
of Dublin's energy-
related emissions come
from the residential and
transport sectors

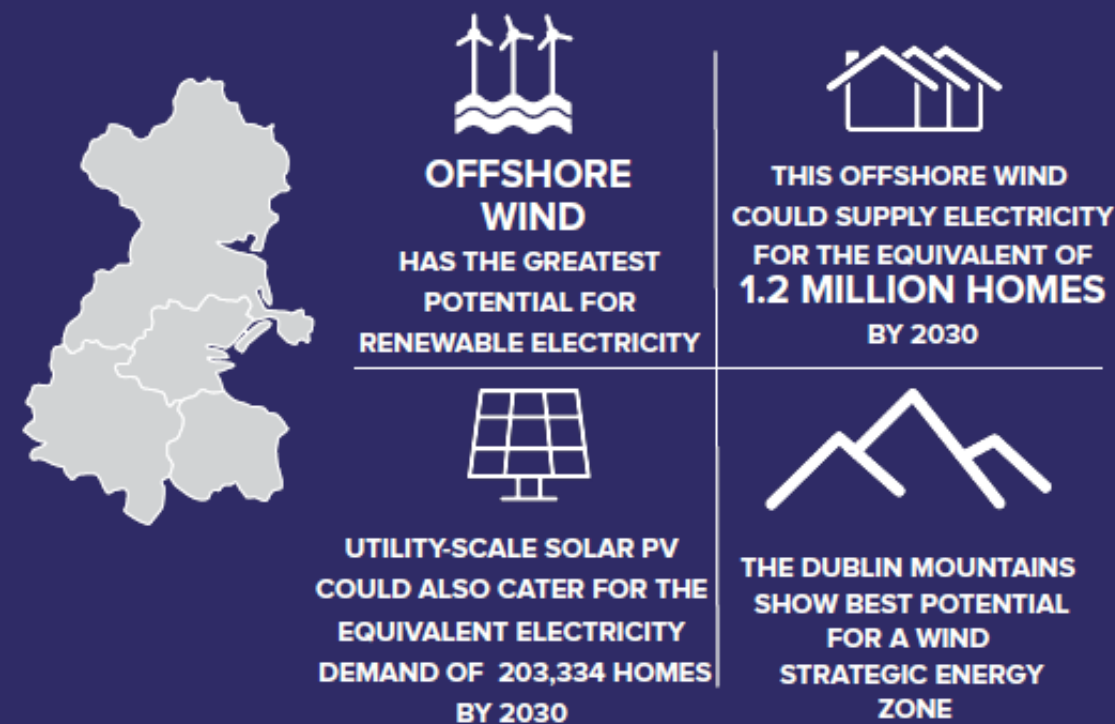
Reduction of
5,969
ktCO₂ needed to get
Dublin to net-zero by
2050

Findings From the Dublin Region Energy Masterplan

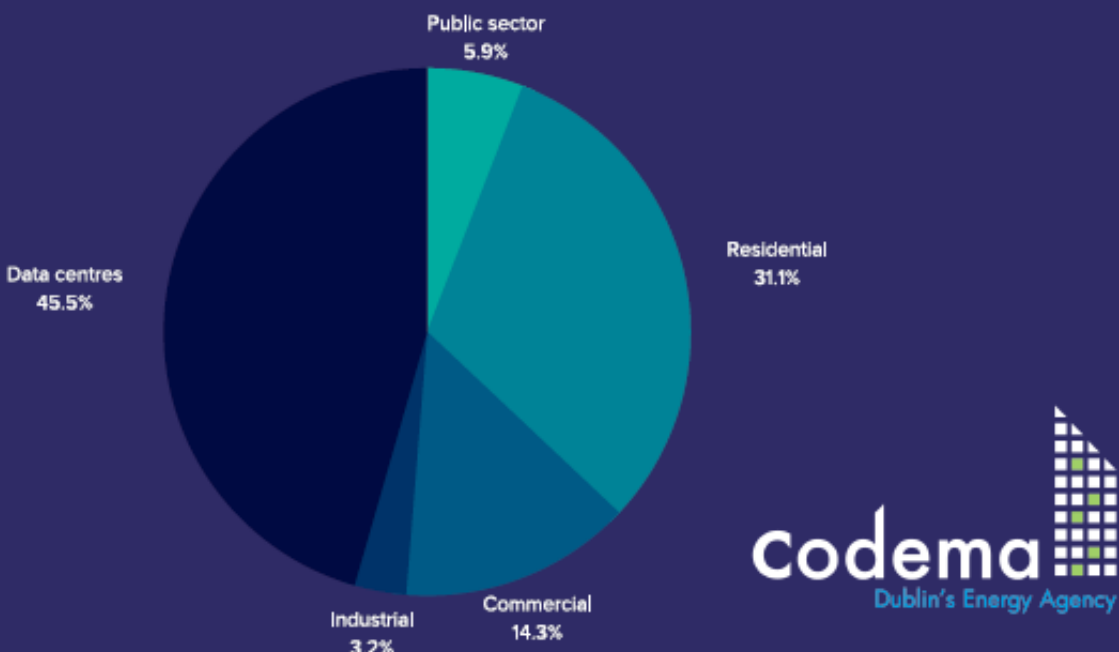
DUBLIN'S HEATING SECTOR



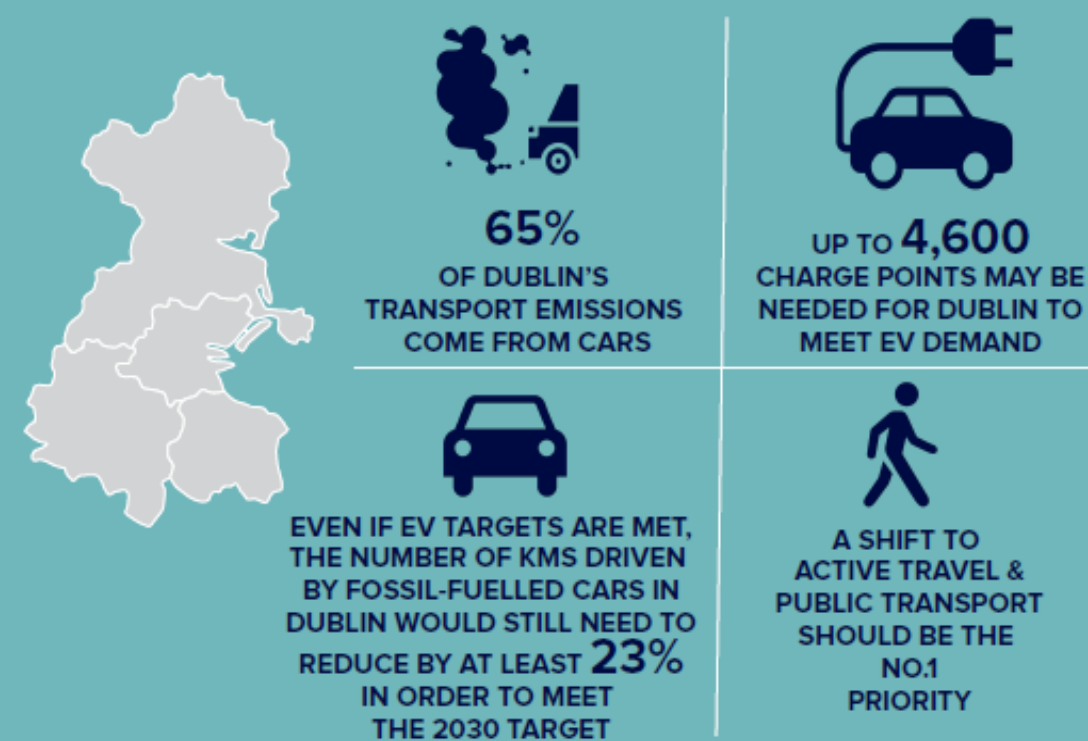
DUBLIN'S ELECTRICITY SECTOR



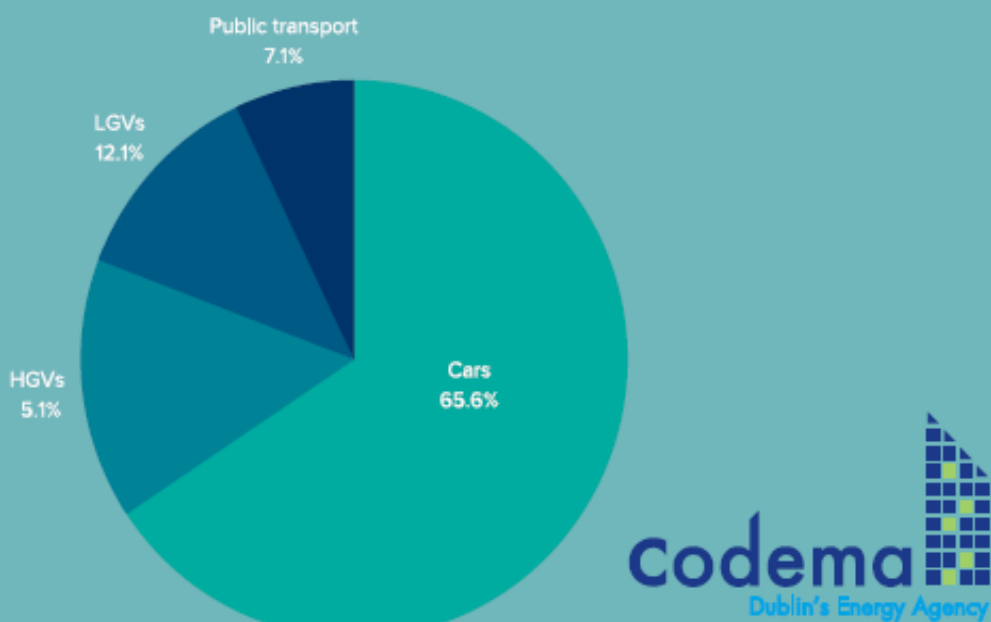
DUBLIN'S CURRENT ELECTRICITY DEMAND BY SECTOR



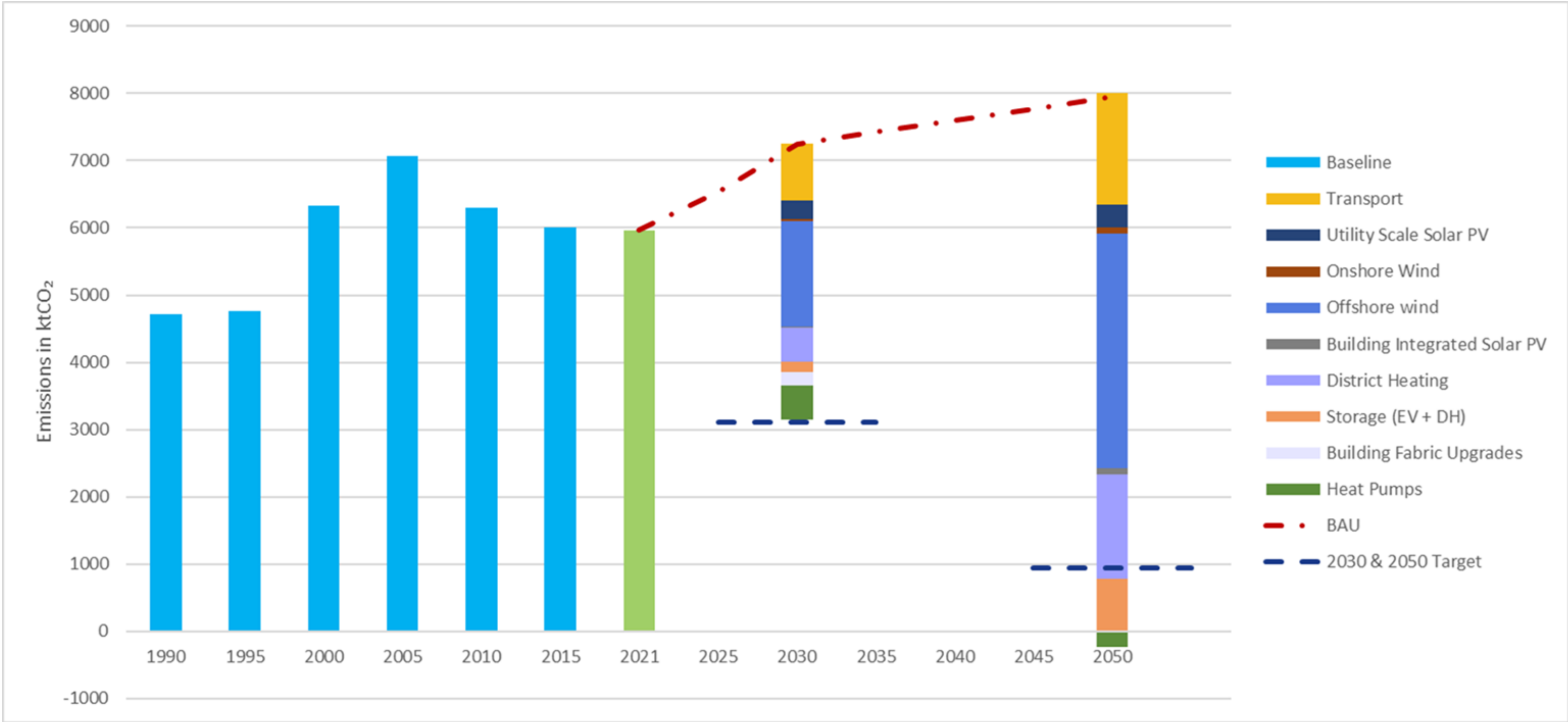
DUBLIN'S TRANSPORT EMISSIONS



YEARLY ENERGY DEMAND BY VEHICLE TYPE IN DUBLIN



Pathway to 2030 & 2050

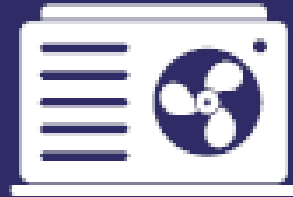
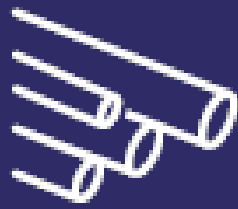


Pathway to 2030 & 2050

KEY FINDINGS FROM THE MASTER PLAN

87%

of Dublin's heat demand could be supplied by district heating by 2050



13%

of Dublin's heat demand could be supplied through heat pumps by 2050

offshore wind

presents the greatest potential for renewable electricity generation



active travel and public transport should be prioritised over cars

areas most at risk of energy poverty

should be prioritised for upgrades



energy planning becomes a requirement for implementing local-level energy plans

Policy Recommendations for Heat



Policy Recommendations for Electricity

**maximise
local
generation**
to reduce the climate
impact of significant
electricity users



**make use of
waste heat**
so that it is made
available for planned
or existing district
heating networks

**enable
infrastructure**
to maximise
Dublin's renewable
energy generation
potential



**minimise
grid impact**
as much
as possible

Policy Recommendations for Transport



prioritise
active
travel



accessibility
and
inclusivity



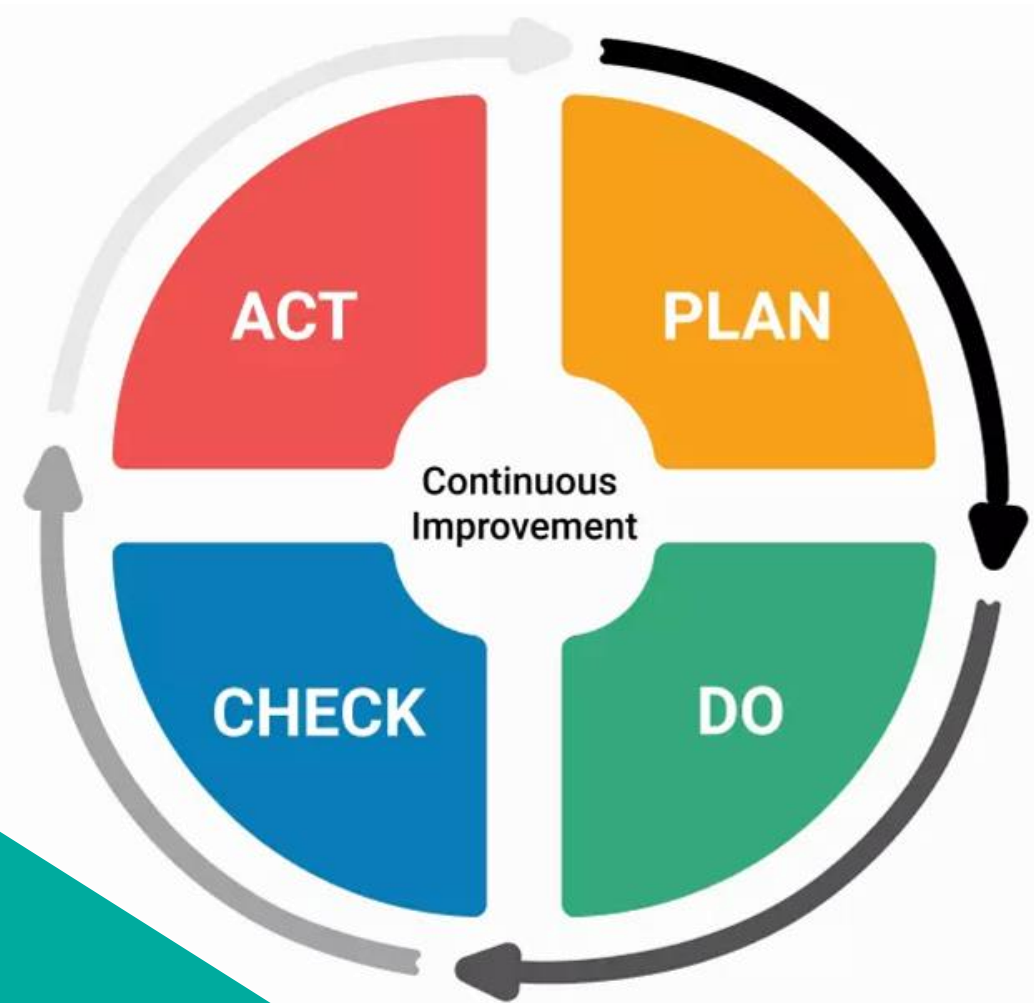
15-minute
neighbour-
hoods



reallocation
of road
space

AS A BUSINESS, WHAT CAN I DO NOW?

“You can’t manage what you don’t measure”



How much energy do we use, and where?

Night use, weekends, interval data, MIC

How do we control our energy usage?

Timers, setpoints, SOPs

What can we improve?

Energy audit (€2k SEAI grant for SMEs)

LONGER TERM GOALS

Decarbonising heat

- District Heating ready, trench sharing?
- Heat Pump - air / water / ground source

Decarbonising electricity

- Self-generation
- Power Purchase Agreements (PPA)
- Peer-to-peer trading

Decarbonising transport

- **Avoid:** minimise business travel / encourage remote working
- **Shift:** rail freight / cargo bikes / active travel / public transport
- **Improve:** battery electric / electric roads / biofuels / hydrogen fuel cell

Energy Efficiency

- Building fabric upgrades
- Building Automation Control Systems - requirement for heating/cooling systems >290 kW from 2025

USEFUL RESOURCES

- [Display Energy Certificate \(DEC\)](#)
- [SEAI Support Scheme for Energy Audits](#)
- [Energy Efficiency Obligation Scheme \(EEOS\)](#)
- [Micro-generation Support Scheme](#)
- Excellence in Energy Efficient Design [\(EXEED\) Certified Grant](#)
- Support Scheme for [Renewable Heat](#)
- Home Energy Saving Kit ([HESK](#))

USEFUL RESOURCES

Energy Audit

An energy audit is an important step for businesses that want to **save money, save energy, and enhance their brand**. An energy audit may be carried out on buildings, processes, or systems and it is a three-step process which involves preparation, a site visit and reporting.

EEOS

Under the Energy Efficiency Obligation Scheme, **energy suppliers must support energy efficiency projects** in businesses and homes across Ireland.

RENEWABLE HEAT

The Support Scheme for Renewable Heat is a government funded **initiative designed to increase the energy generated from renewable sources in the heat sector**. The scheme is open to commercial, industrial, agricultural, district heating, public sector and other non-domestic heat users...

DEC

The certificate produced is designed for public display and is called a Display Energy Certificate (DEC). **The DEC is designed for public display and incorporates an operational Building Energy Rating (BER)** and other relevant performance information.

Eligible measures include:

- Lighting
- Heating
- Ventilation & aircon
- Transport
- Combined heat & power
- Motors, drives & pumps
- Refrigeration
- Industry processes

‘where a total useful floor area over 500 m² of a building for which an energy performance certificate has been issued in accordance with Article 12(1) is frequently visited by the public, the energy performance certificate is displayed in a prominent place clearly visible to the public.’

Q&A



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THE ENERGY TRANSITION WILL NEED VISION

"Even if information, models, and implementation could be perfect in every way, how far can they guide us, **if we know what direction we want to move away from but not what direction we want to go toward?** There may be motivation in escaping doom, but there is even more in creating a better world...one essential tool for making a vision responsible is sharing it with others and incorporating their visions. **Only shared vision can be responsible.**"

ENVIRONMENTAL SCIENTIST, DONELLA MEADOWS

Reference: <https://donellameadows.org/archives/envisioning-a-sustainable-world-video/>

It seemed impossible...



Postcards from Dublin 2050

What is your vision
of Dublin free from
fossil fuels?

Write a message from the future
in the form of a postcard.

We are not asking for solutions.

In your ideal world, what would our
capital look and feel like in 2050?

**ZERO
TOGETHER**
Towards a cleaner, healthier Dublin



@Zero_Together

#ZeroTogetherDublin

GET CREATIVE!
ADD A SKETCH
TO GO
ALONGSIDE
YOUR MESSAGE!

To post your message
from Dublin 2050
please send to:
The Loft,
2-4 Crown Alley,
Temple Bar
D02 TK74

**ZERO
TOGETHER**
Towards a cleaner, healthier Dublin



This project received funding from the European Union's Horizon 2020
research and innovation programme under grant agreement N° 847136.

**ZERO
TOGETHER**
Towards a cleaner, healthier Dublin



Postcards From Dublin 2050



It's time to get involved in
Dublin's energy transition

Let's reach Zero Together

THANK YOU

GET IN TOUCH WITH US

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Dublin Region Energy Master Plan:
john.oshea@codema.ie

[@Zero_Together](#) [@CodemaDublin](#)

