

Session 6: Decarbonisation & Other Topics

Chair: Mary Flynn, Regional Manager, TII

11.15 am	Legal Hot Topics in Infrastructure Projects	Michelle Doyle and Nathan Walsh, McCann Fitzgerald LLP
11.35 am	Transition of ZEVI to TII and Spotlight on Regional and Local Plan: and Local Authority EV charging project roll out	Donal Minnock and Michael McGrath, Zero Emission Vehicle Ireland - TII
11.55 am	PFAS: Understanding the Risks for TII Projects	Christopher Newton, Senior Hydrogeologist, Arup
12.15 pm	Q&A	
12.35 pm	Conference close and lunch	

TRANSPORT INFRASTRUCTURE IRELAND

Regional and Local Plan: Local Authority EV charging project roll

Donal Minnock and Michael McGrath, TII Alternative Fuels Projects Unit

Transition of ZEV to TII & Spotlight on Regional and Local Plan

Dónal Minnock, Head of ZEV



ZEVI Transition

- Zero Emission Vehicles Ireland (ZEVI) was established on July 21, 2022, as a dedicated office within the Department of Transport to accelerate the transition to zero-emission vehicles.
- On 30 March 2026, key infrastructure functions of ZEVI were transferred from the Department to Transport Infrastructure Ireland (TII) in order to build for the future and enable a more efficient infrastructure rollout.



DoT Functions

- **Legislation:** Manage the implementation of Statutory Instruments (SI) and potentially new primary legislation related to data.
- **Budgets and Grants:** Retain control of the overall budget. Funding will be allocated to TII as the Approving Authority for LA schemes and other infrastructure projects.
- **Vehicle Grants and Schemes:** Administered by SEAI on behalf of DoT, consistent with the budget and grant responsibilities.
- **AFIR:** Oversight of reporting and legislative responsibilities will remain with the DoT.
- **Data Policy and Strategy:** Further development of data policy and strategy through engagement with EU partners and organisations.
- **Schemes:** The Sports Club scheme will continue to be managed by the DoT and Pobal.

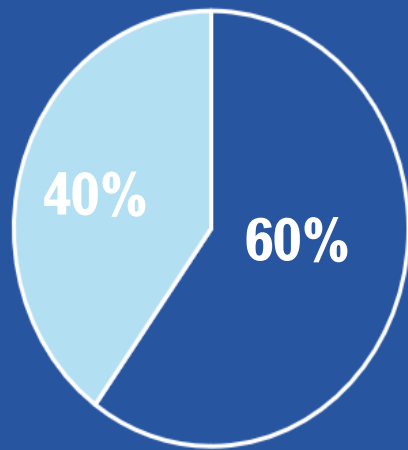
August 2026 Insights

Based on data shared to the DXP by 10 CPOs

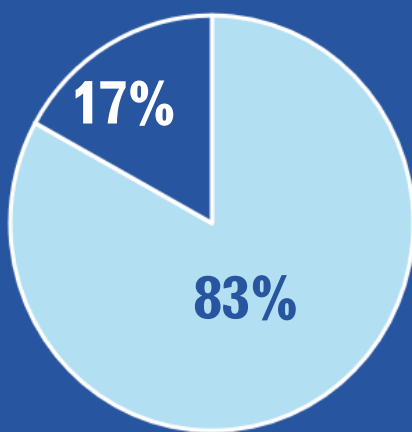


AC vs DC Split

Points

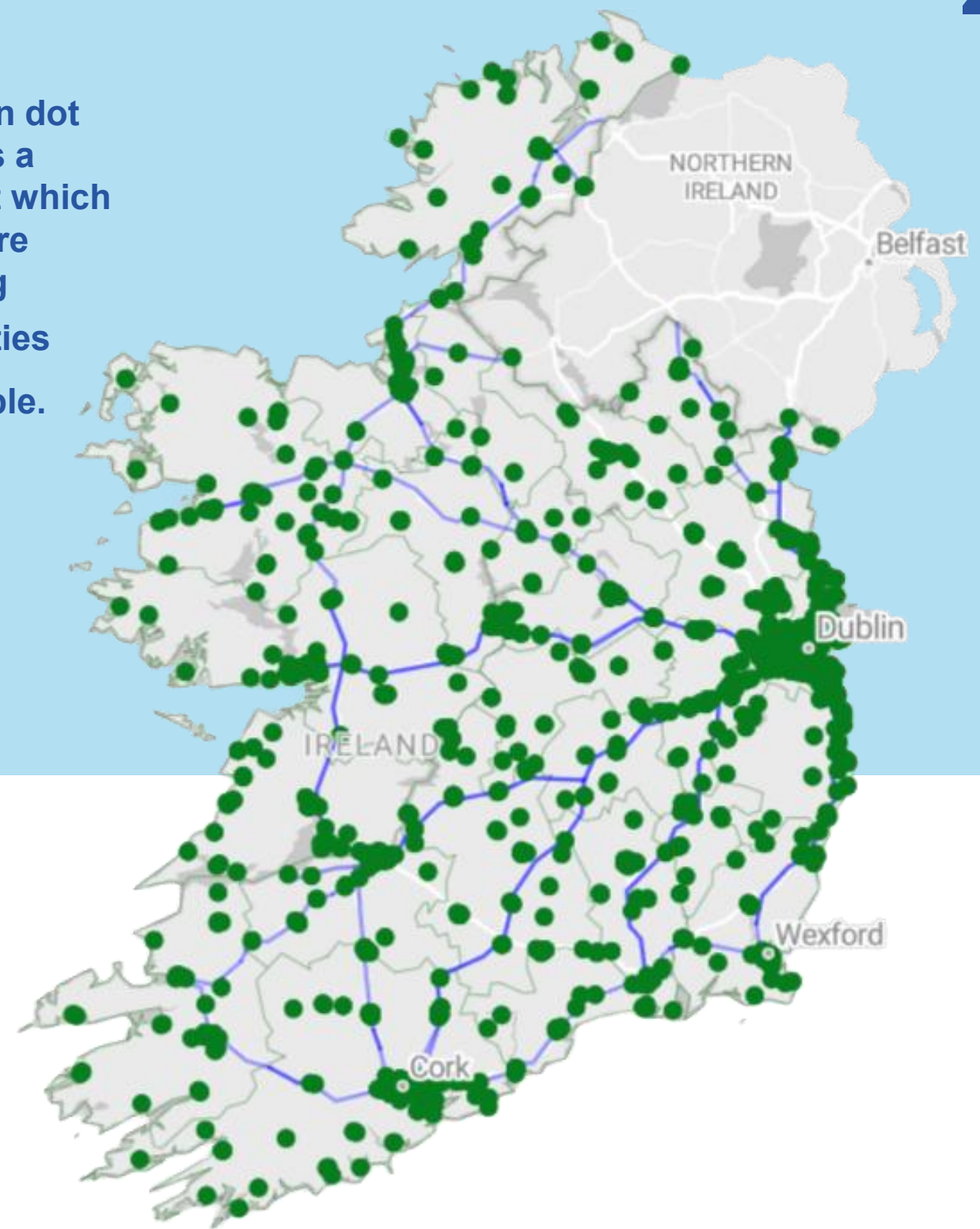


Power



DC AC

Each green dot represents a location at which one or more recharging opportunities are available.



Breakdown of DC Points

- 52%** Of DC points are **Ultrafast 1 & 2** (150kW and above)
- 44%** Of DC points are **Fast** (50kW - 150kW)
- 4%** Of DC points are **Slow** (< 50kW)

Breakdown of AC Points

- 2%** Of AC points are **Fast** (> 22kW)
- 96%** Of AC points are **Medium** (7.4kW - 22kW)
- 2%** Of AC points are **Slow** (< 7.4kW)

3,654 Charging Points **1,225** Locations **270MW** Total Power

Categories are as defined in the EU Alternative Fuels Infrastructure Regulation

Based on data from the following CPOs



Regional & Local EV Charging Infrastructure Plan & LA EV Pilot Programme Overview

Michael McGrath, ZEVI Regional and Local Lead

North Star - 30% of Private Cars by 2030

Estimated number of 195,000 plug-in EVs on the road by 2025

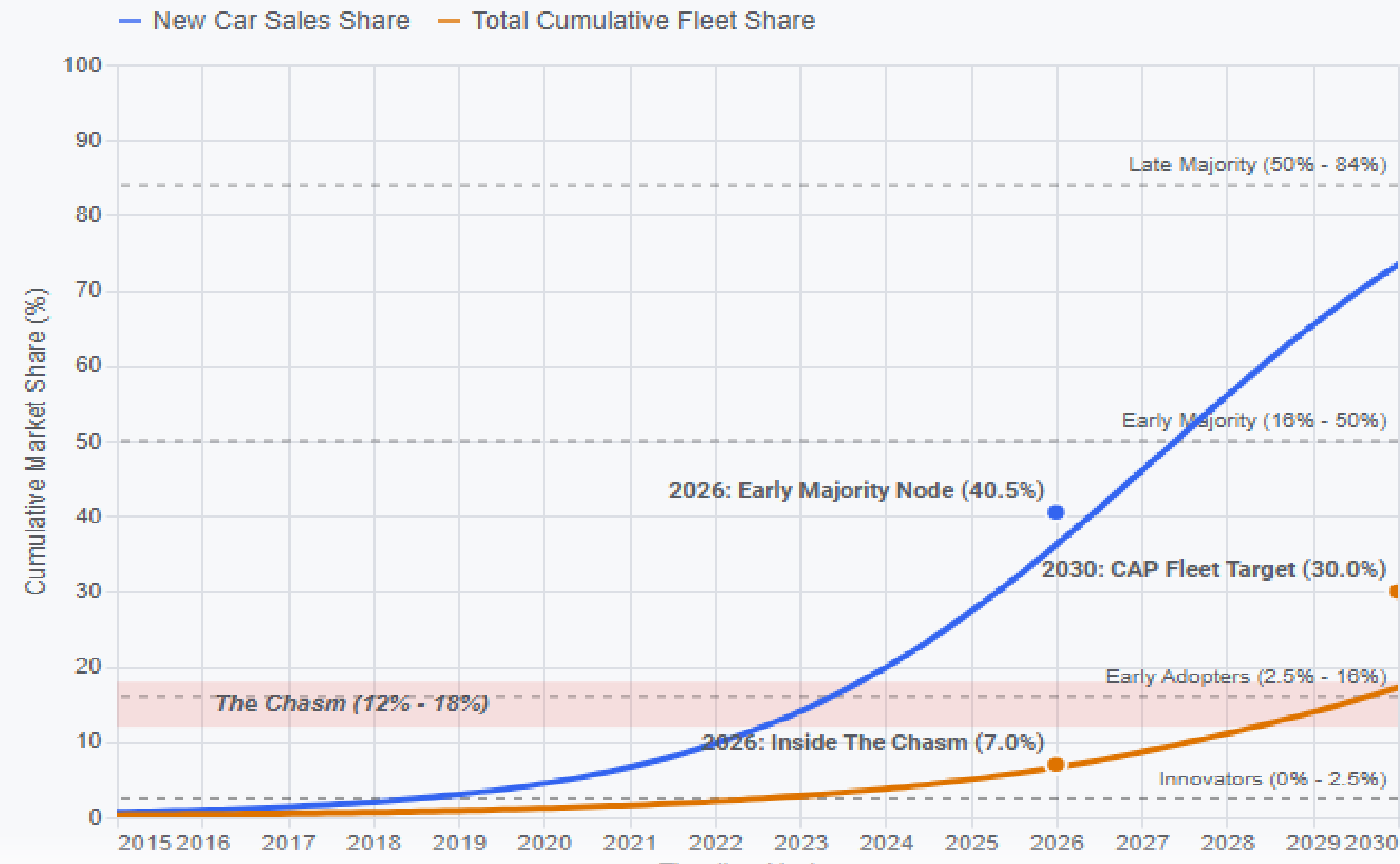
AFIR requires 215,000KW by 2025 and 715,000KW by 2030*1

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*1 Based on 30% fleet being 950,000EVs in 2030

Ireland EV Transition Projection to 2030: New Sales vs. Total Fleet

Tracking current 2026 market milestones and trajectories against CAP targets and Adoption Lifecycles



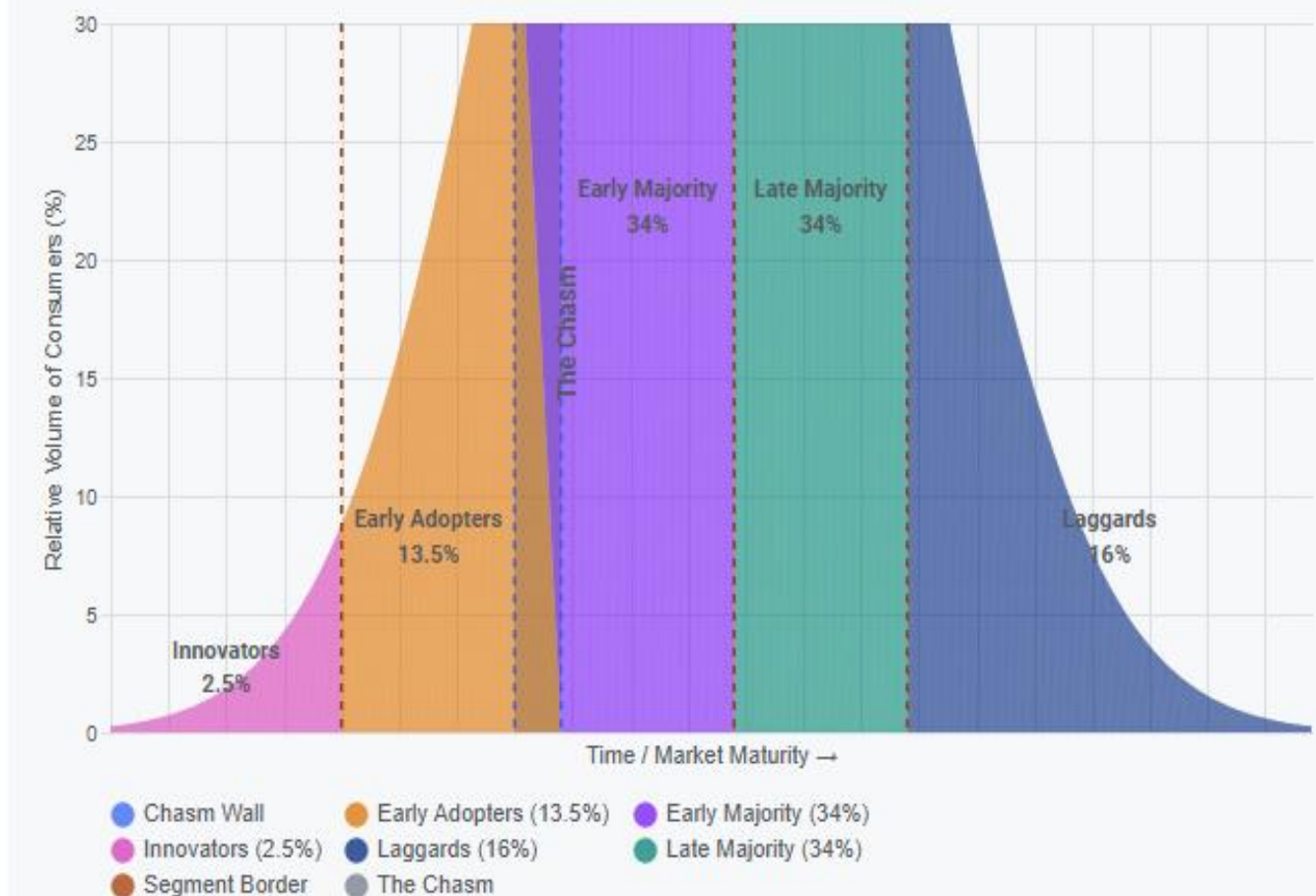
Fuel Type	Total	Private Cars
Battery Electric Vehicles	146,654 (+4,934)	136,709 (+4,752)
Plug-in Hybrid Electric Vehicles	119,599 (+3,296)	115,558(+3,083)
Total	266,253 (+8,230)	252,267 (+7,835)

The growth in the total number of EVs from August 2025 to August 2026 is 74,680 vehicles.

In terms of fully hybrid vehicles, there were a total of 246,025 vehicles (+4,232) including 234,325 private cars (+4,143) by end August 2026.

- **New Cars Sales- Early Majority Phase** with @40% all new cars EV
- **Total Fleet -Early Adopters Phase** with @7% of Total fleet are BEV

The Technology Adoption Lifecycle Bell Curve





MEETING USER NEEDS THROUGH BETTER INFRASTRUCTURE PLANNING



Proactively planning EV infrastructure around user needs and combining complementary solutions delivers higher utilisation, scalable infrastructure and a better user experience

- ✓ Right Charger
 - ✓ Right Location
 - ✓ Right Purpose
- ...meeting user needs



REGIONAL AND LOCAL EV CHARGING NETWORK PLAN

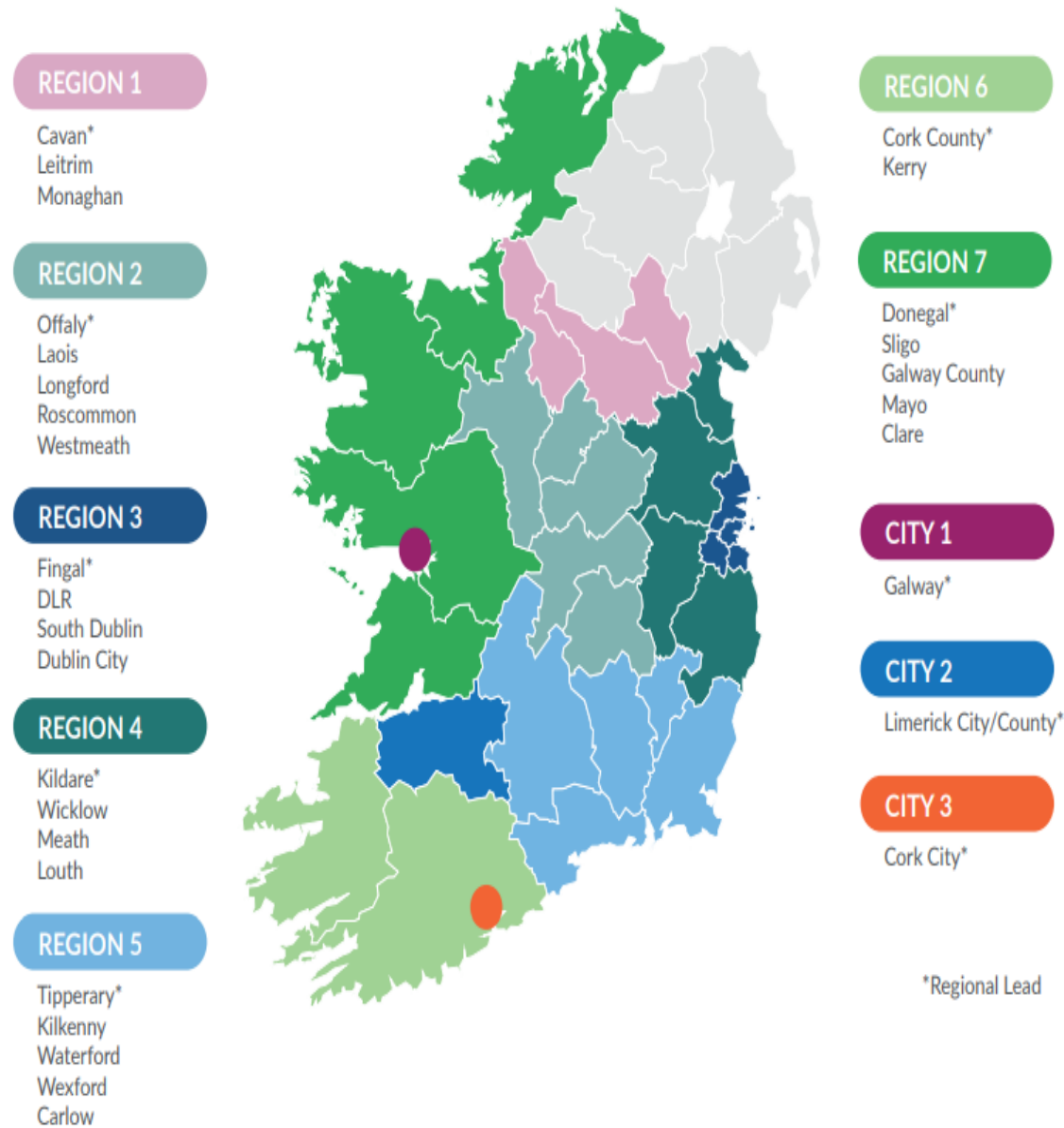
Regional and Local EV Charging Network Plan 2024-2030



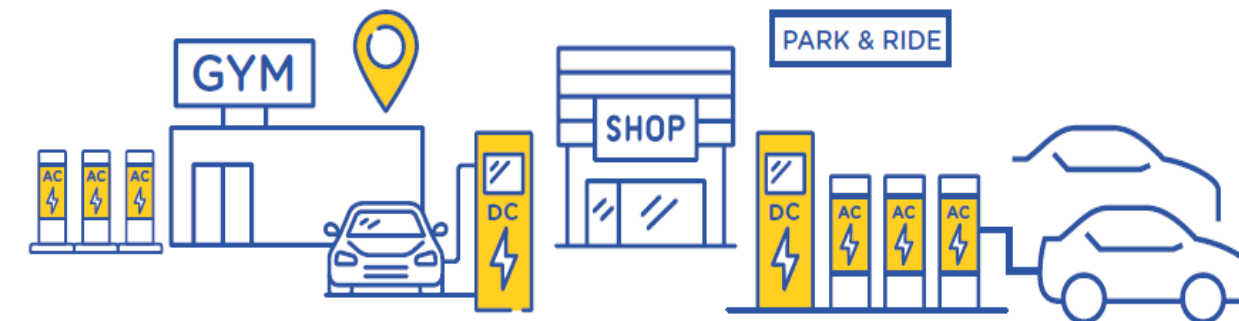
The objectives of this plan are to:

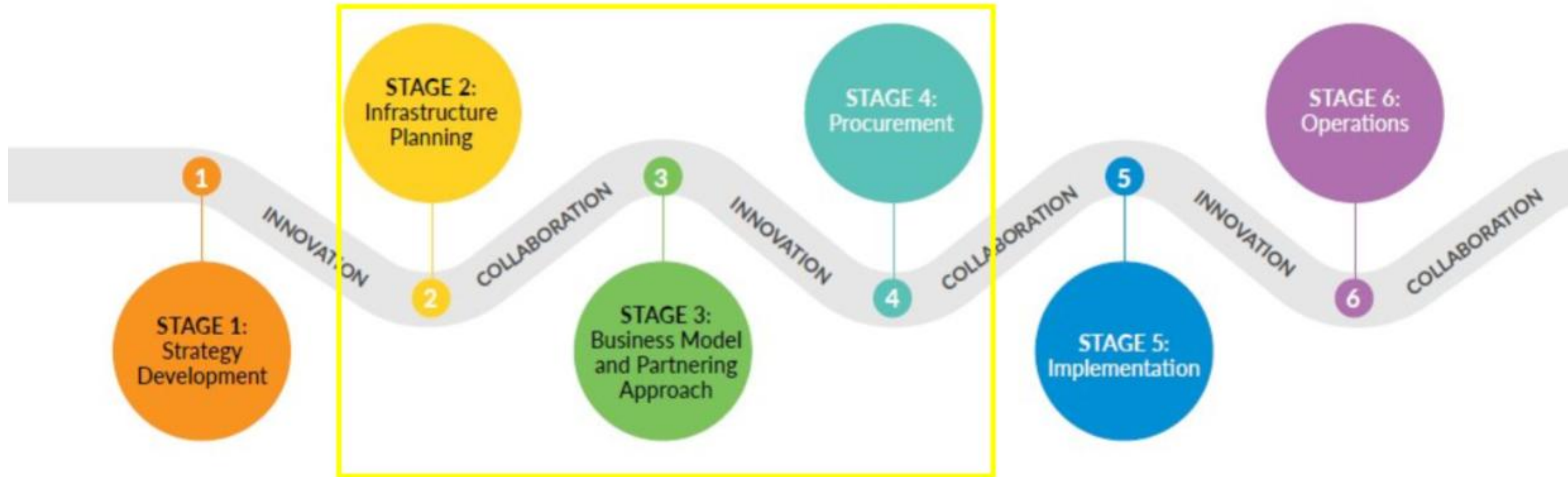
- 1) Support the development and delivery of well-defined local and regional plans for a coordinated, resilient, self-sustaining, future- proofed network that minimises public funding supports and meets user needs.
- 2) In partnership with key stakeholders, support the coordinated and accelerated expansion of a publicly accessible destination and neighbourhood EV charging network that aligns with greater e-mobility policies.
- 3) Provide a pathway to deliver on national infrastructure targets in support of both AFIR requirements and Climate Action Plan objectives.

The accelerated expansion of public destination and neighbourhood charging infrastructure will be led by local authorities with the support and in partnership with other public sector bodies, private sector groups and other stakeholders.



- ✓ Right Charger
 - ✓ Right Location
 - ✓ Right Purpose
- ...meeting user needs*





All LAs complete Q2 2026

Site Selection, Business model and procurement 2026

Commence 2027(majority)
(some early movers)

15-20 year concession

Stakeholder Engagement and Collaboration

ZEVI FOUNDATIONAL SUPPORTS

Enabling Local Authorities from Planning to National Scale-Up



SUPPORTED BY ZEVI



Funding & Resources

Capital support, leveraging private investment & resource alignment



Technical Expertise

Training, workshops, KPI & PPP/concession templates, knowledge repository



Standards & Procurement

Guidelines, design standards & contract templates

OUTCOMES



Better local planning & decision-making



Evidence-based infrastructure deployment



National consistency with local flexibility



Accelerated delivery of EV charging infrastructure



NEIGHBOURHOOD CHARGING SOLUTIONS HIERARCHY



Cross Footpath Channel -National Work Group

- Regulatory and Policy barriers

LA Working Group

- Implementation – Opportunities, risks, barriers and procedures

Private Wires:

- Opportunities for Share Charging

PILOT PROJECTS/SITES AND GRANT SCHEME



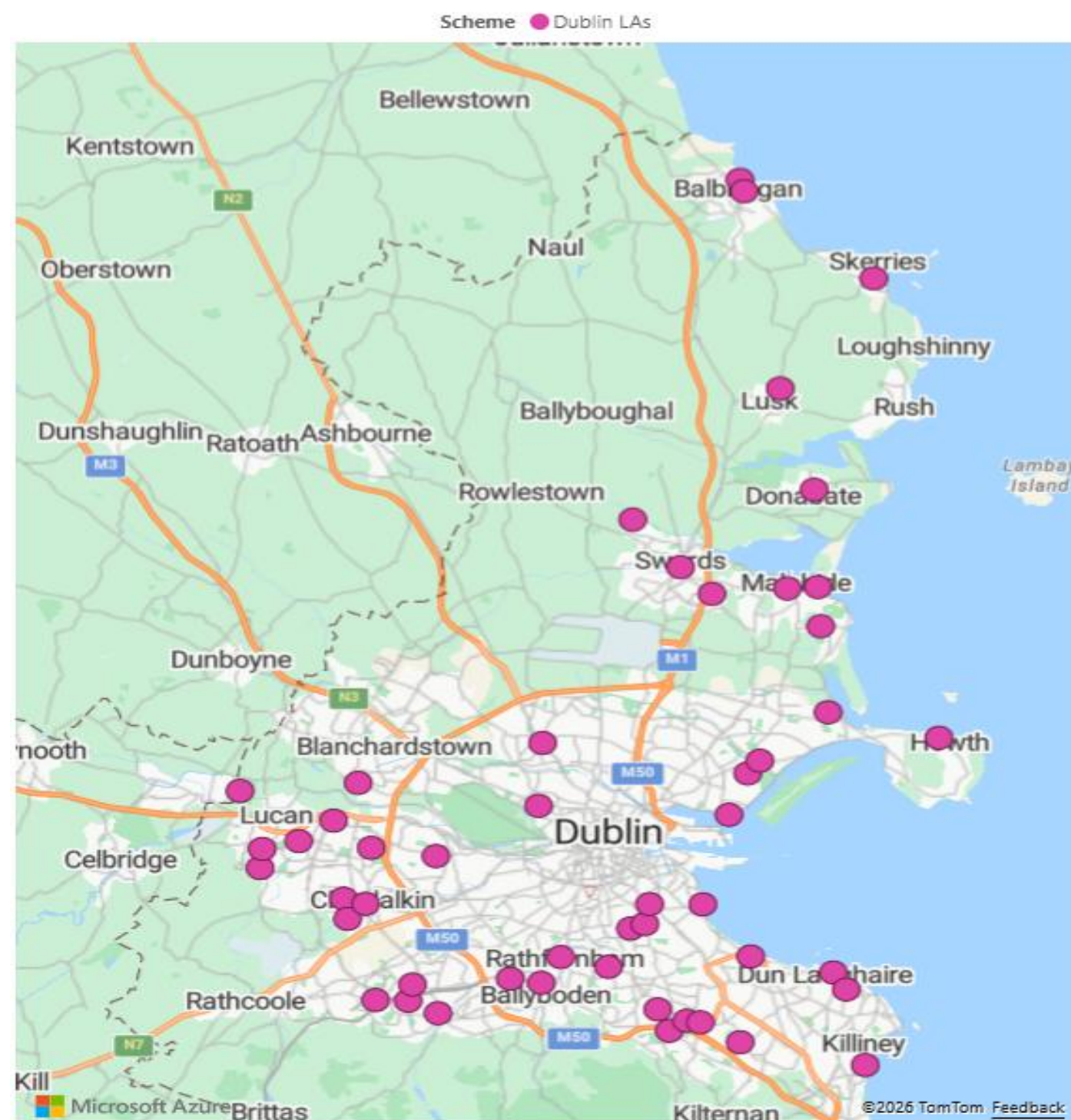
- Dublin Destination Scheme - 8900KW (Concession)
200 CPs at 50 Locations, Concession, High Power DC Charging
 - Shared Island Sports Scheme – 8950KW (Grant)
50- 100KW DC Charging- Stayed with DOT
 - Limerick Destination Scheme – 1200KW (Concession serviced sites)
Concession across 26CPs at 13 sites High Power DC Charging
 - ZEVI LA Pilots - 6462KW (Various LA Service, Concession)
 - 167CPS at 24 locations
Innovative projects, multi user needs, renewables, tourism, scalability, VFM
neighbourhood solutions
- Total @ 26,000KW (note together with LDV schemes total 90,000KW approx. 20% of national)

- ✓ Right Charger
- ✓ Right Location
- ✓ Right Purpose

...meeting user needs



Proposed Site Locations



Fingal Co Council lead- Destination Focused-
14 sites under construction, 5 live,
programmed completion June 2027



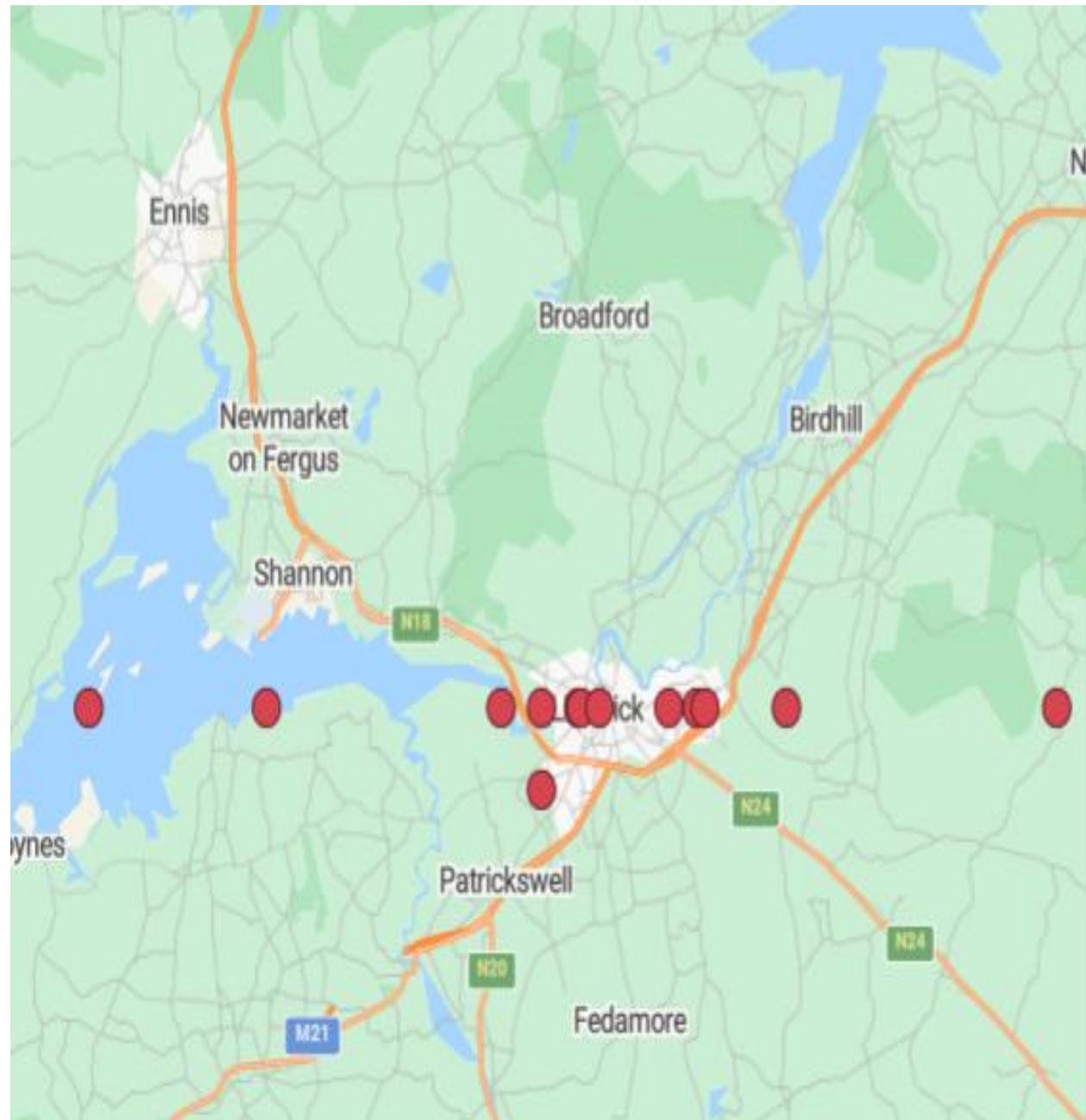
Corkagh park (SDCC)



Bath Road (FCC)



Arena Road (DLR)

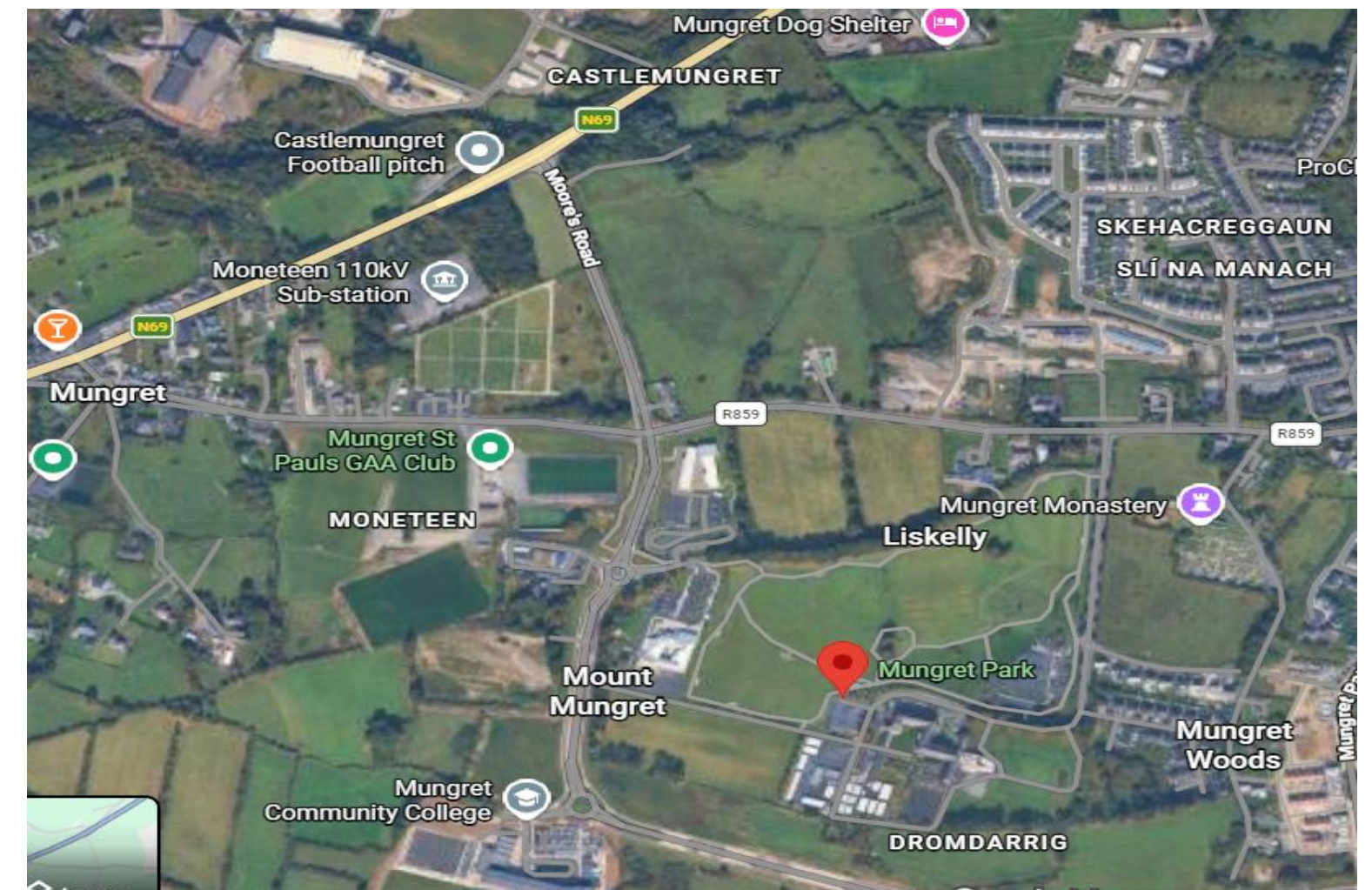


Mungret Park



Destination Focused-

- Zevi funded infrastructure and once complete Limerick procured CPO under Serviced concession
- User need example - Destination and close proximity to National Road- opportunity to use park or walk while charging. Facilities close by park, restaurant, Gym, Sports Clubs, Education



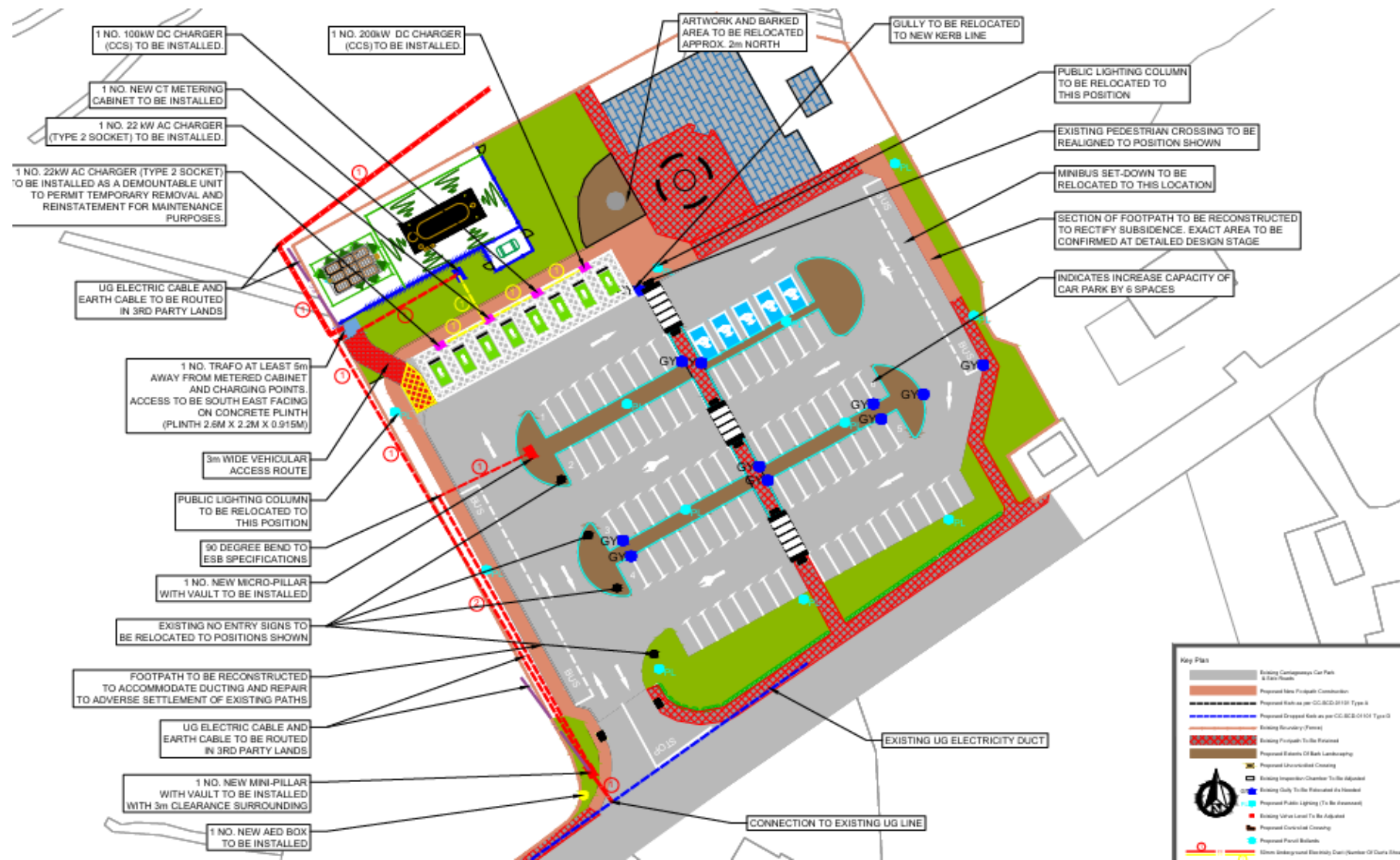


Multiple User Needs

- Workplace
 - Destination
 - Enroute
 - Nighttime
- Neighbourhood Charging
for Residents with no off-
street parking

Barriers addressed

- Minimal grid impact – behind the meter solution and Battery/Solar
- Multi user needs addressed long and short duration charging options
- Discounted night time neighbourhood rates for those without driveways
- Universally Designed
- Scalable



Destination User Need – Seasonal Demand Wild Atlantic Way

- 190kva Connection
- 1 x 200kw DC Charger
- 1x 100kw DC Charger
- 2x 22kw AC Chargers
- Full Universal Design
- Scalable

Business Model/Partnering Approach

- 7 sites - Joint procurement between Mayo, Donegal, Sligo, Clare and of a concession contract to include Design, build operate and maintain.
- Programmed advertised Oct 2026
- Engagement with Failte Ireland and Car Rental association

Clare (Ennis Town, Glor & Doolin pier car park)	288	200	88	Concession Contract developed, should go out on eTenders end of Sep
Mayo (Ballycastle & Croagh Patrick Car park)	426	250	176	Concession Contract developed, should go out on eTenders end of Sep
Sligo (Strandhill & Enniscrone)	376	200	176	Concession Contract developed, should go out on eTenders end of Sep
Donegal Sliabh Liag Visitor Centre Carpark)	388	300	88	Concession Contract developed, should go out on eTenders end of Sep



EV INFRASTRUCTURE- BUILT ON SOLID FOUNDATIONS



ARUP

PFAS: Understanding the Risks for TII Projects

Christopher Newton, Senior Hydrogeologist

PFAS: Understanding the Risks for TII Projects

Christopher Newton | Leila Bowe | Joy Wamagata

2 October 2026

PFAS: Understanding the Risks for TII Projects

Question

- Can a chemical stop a major project?
- For over a year?...
- West Gate Tunnel Project, Melbourne¹
- No suitable disposal location for ~3,000,000 tonnes of spoil contaminated with PFAS
- Cost increase (billions \$'s)
- Project delay (Over 1 year)

West Gate Tunnel toxic soil decision paves way for multi-billion-dollar transport project

By Jackson Peck

ABC Ballarat

Land Pollution

Posted 25 Jun 2021 at 2:17am, updated 25 Jun 2021 at 3:30am



An artist impression of the northern tunnel portal at Footscray for the West Gate Tunnel Project. (Supplied: Victorian Government)

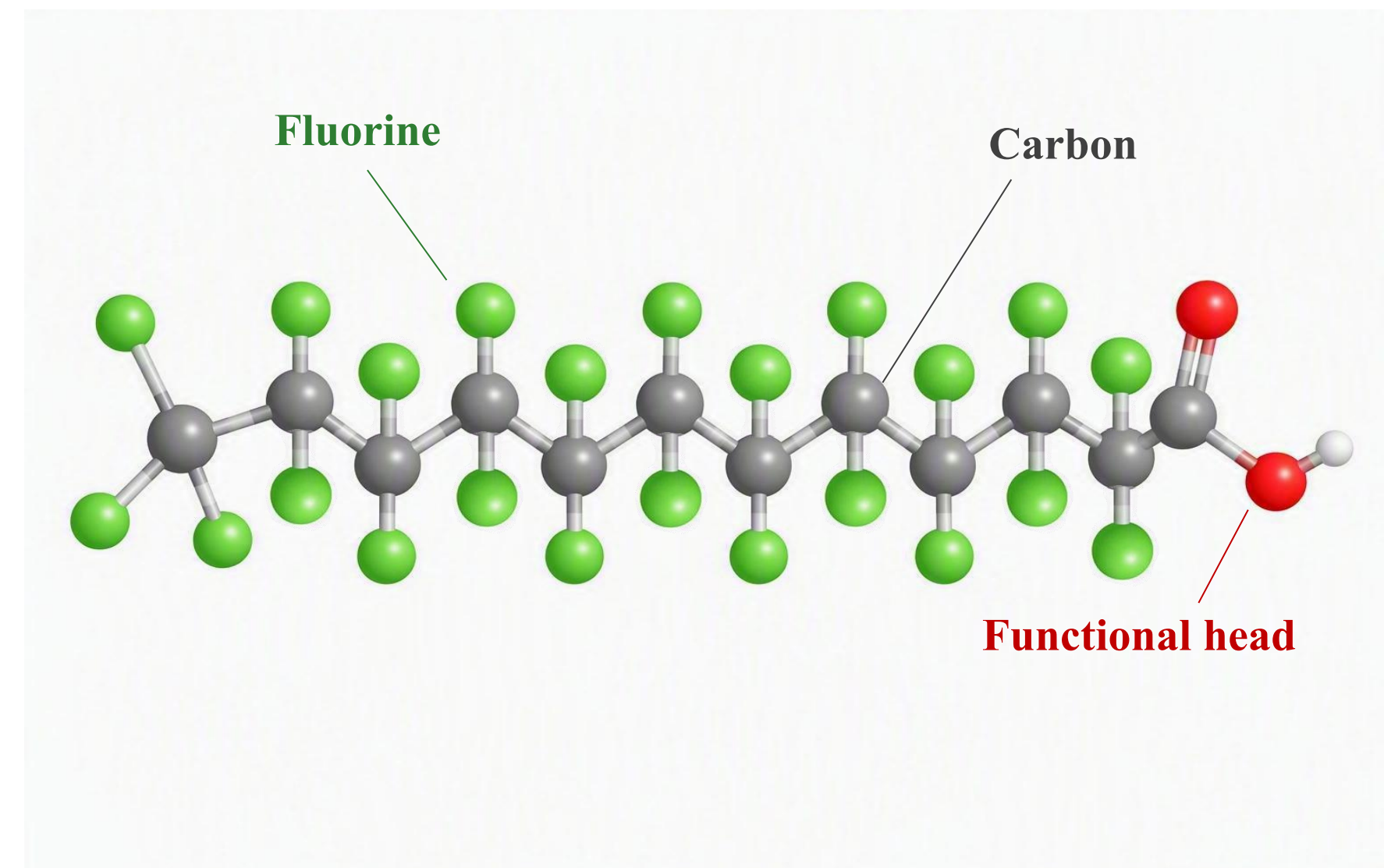
¹ West Gate Tunnel – Delays, Cost Blowout and Opening Date, 2026, Australia Pulse. <https://australiapulse.net/politics/west-gate-tunnel-delays-costs/>

² West Gate Tunnel toxic soil decision paves way for multi-billion-dollar transport project, 2021, ABC News. <https://www.abc.net.au/news/2021-06-25/west-gate-tunnel-toxic-soil-decision/100243366>

The challenge

PFAS Definition

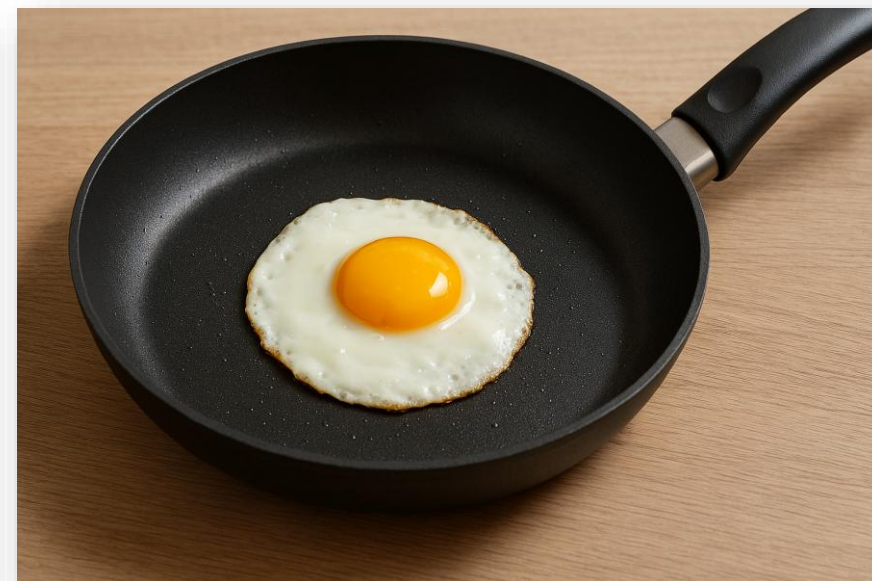
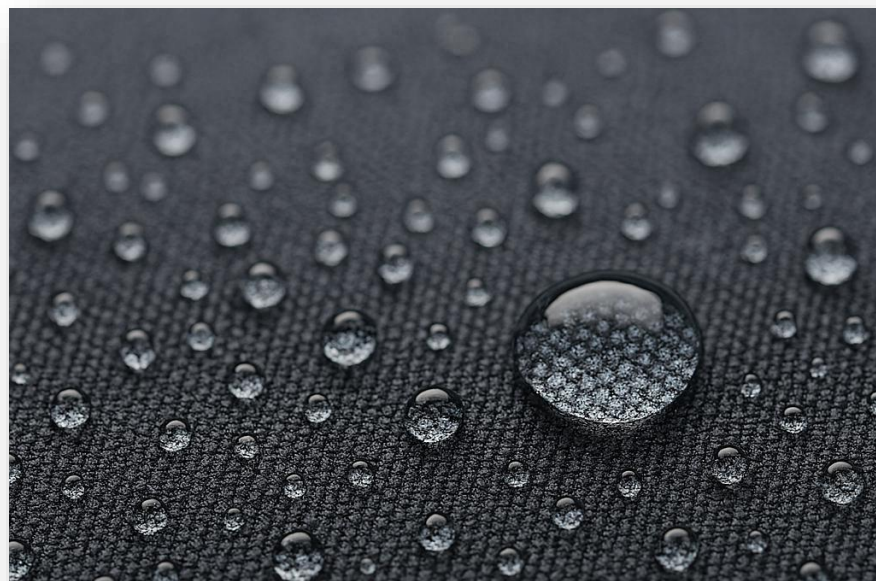
- PFAS is an acronym for group of chemicals:
‘per- and polyfluoroalkyl substances’
- They contain fluorine atoms bonded to carbon atoms
- one of the strongest known bonds
- The bond gives PFAS unique properties and make it very durable and hard to break down in the environment
- The “functional head” can make the chain soluble and very mobile in water
- Hard to break down + very mobile = PFAS can be transported to receptors far from the source
- Sources can be outside of conventional study areas



The challenge

Origins

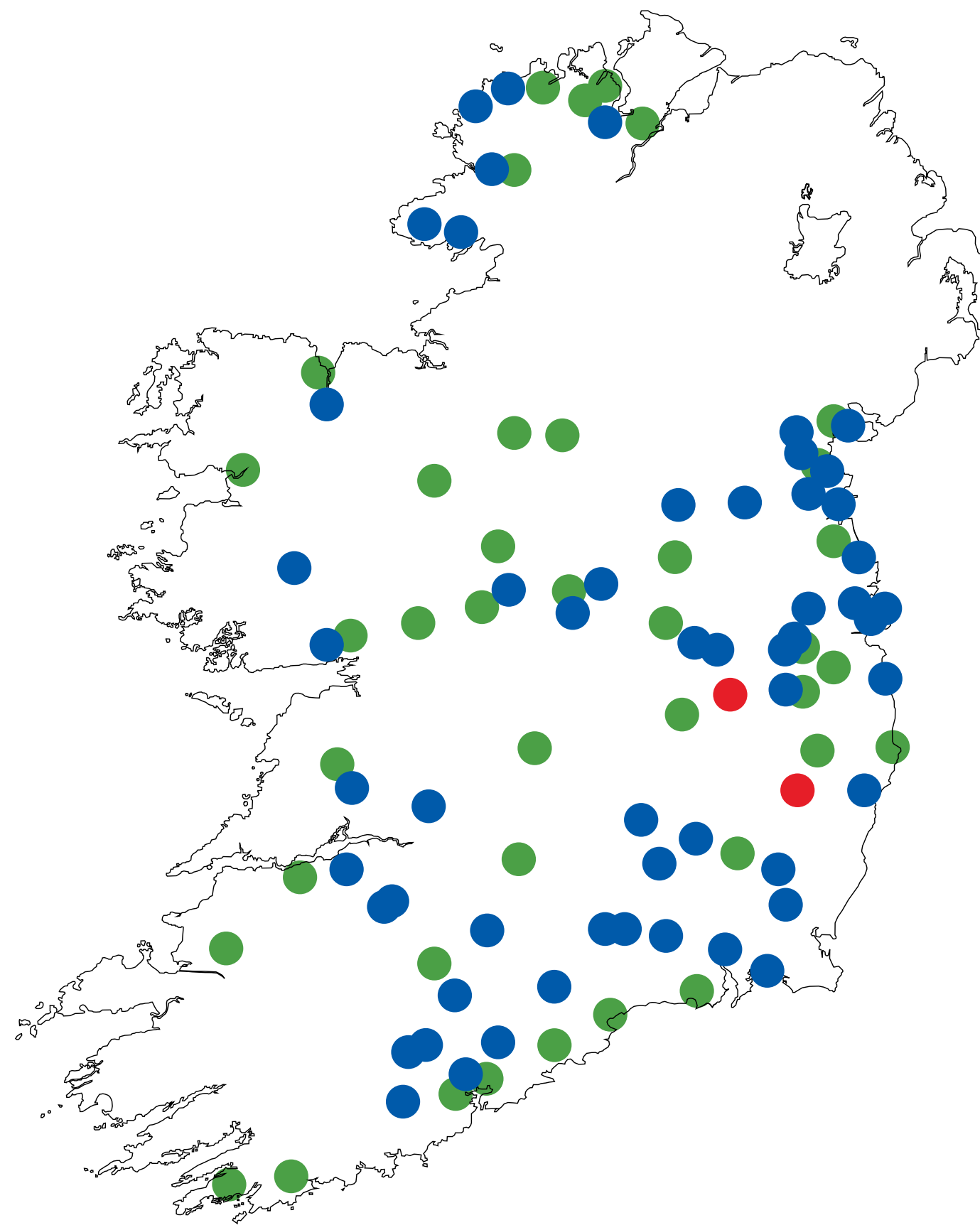
- **First produced** in 1940s by materials and technology companies (DuPont and 3M)
- **Some properties** – Inert, low coefficient of friction, waterproof, and stable at high temperatures
- **Use** – Numerous including textiles, non-stick pans, batteries and fire fighting foams etc...
- **‘Dark Waters’** – 2005 DuPont settled a \$200 million claim for contaminating a water supply
- **Health effects** (Certain PFAS) – Reduced fertility, cancer, neurotoxicity & endocrine disruption
- **Bioaccumulates** – Not broken down in the body



The challenge

PFAS Monitoring

- Published information confirms that PFAS compounds can be found throughout the country
- Concentrations are mostly low
- Concentrations are linked to anthropogenic sources:
 - Landfill Leachate
 - Biosolid from Waste-Water Treatment



PFAS detections

- Groundwater ¹
- Sediment/Biosolid ²
- Leachate ³

¹ EPA. *Ireland's National Water Quality Monitoring Programme 2022-2027*. https://www.epa.ie/publications/monitoring--assessment/freshwater--marine/EPA_WFD_MonitoringProgramme_2022_2027.pdf

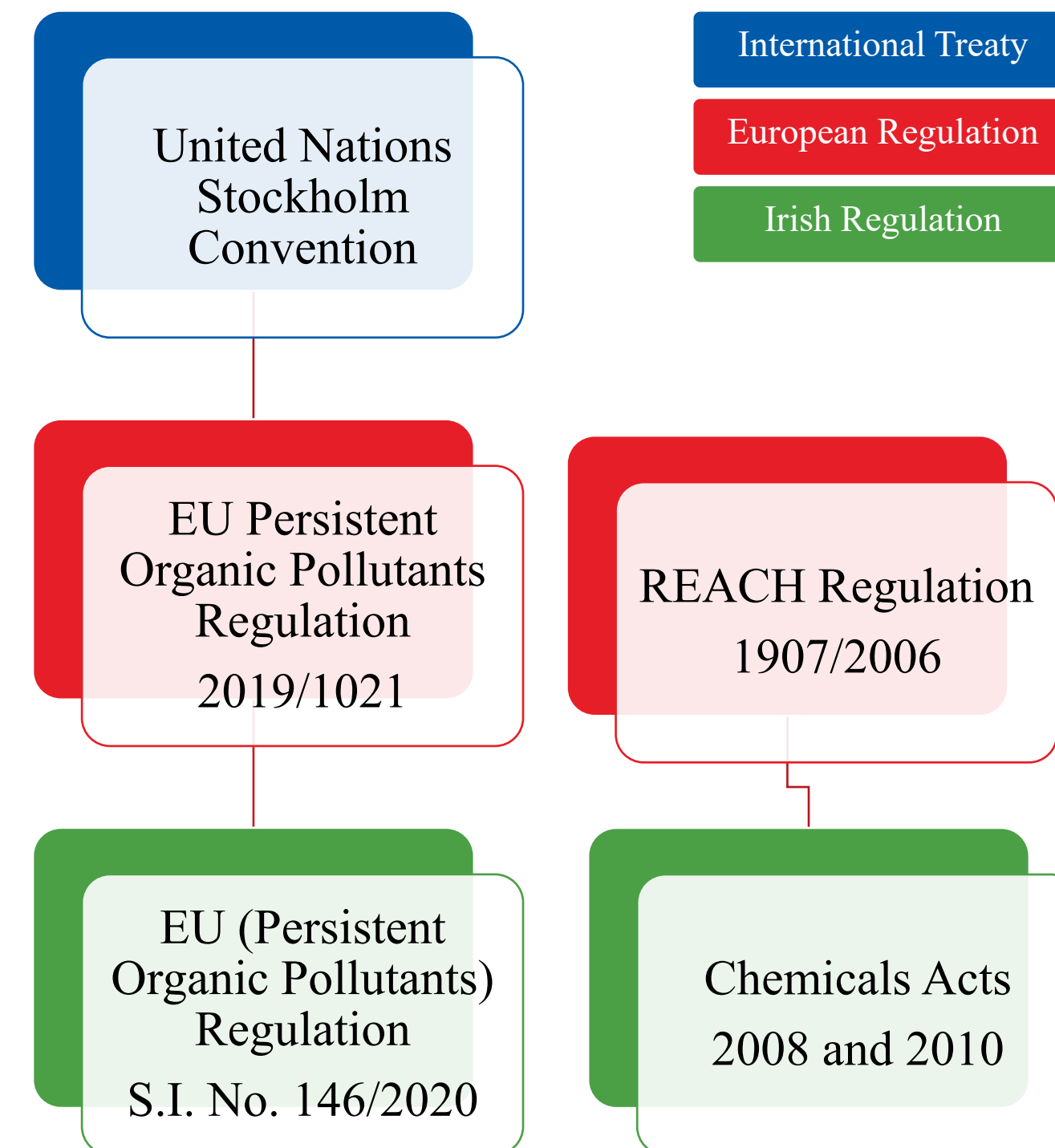
² Ma, Y.; Sharkey, M.; Coggins, A. M.; Stubbings, W.; Healy, M. G.; Harrad, S. Concentrations of Perfluoroalkyl Substances in Sediments and Wastewater Treatment Plant-Derived Biosolids from Ireland. SSRN 2024. <https://doi.org/10.2139/ssrn.5043591>

³ Harrad, S.; Drage, D.; Sharkey, M.; Berresheim, H. *Furthering Understanding of Emissions from Landfilled Waste Containing POP-BFRs and PFASs (FUEL): 2016-HW-MS-8*, Online version.; EPA Research report; Environmental Protection Agency: Johnstown Castle, Co. Wexford, Ireland, 2020

The challenge

Regulations – Restrictions and Bans

- International Convention reduce or eliminate some chemicals
- REACH prohibits and restricts sale of products containing certain chemicals
 - Regrettable substitution
 - Looming Europe wide ban for the PFAS as a group
- Persistent Organic Pollutants Regulations
 - Defines **three** PFAS waste thresholds
 - Waste must be destroyed **if above** the threshold
 - No regulations for sub-threshold waste concentrations
- Potential mis-match between waste and Environment regulations



PFAS chemicals

Regulations – Environmental limits

2026

- PFOS surface water
0.65 ng/l
- PFAS Drinking Water
100 ng/l [sum of 20]

- PFAS groundwater
100 ng/l [sum of 20]
4.4 ng/l [sum of 4]
- PFAS surface water
4.4 ng/l [sum of 25]

2027

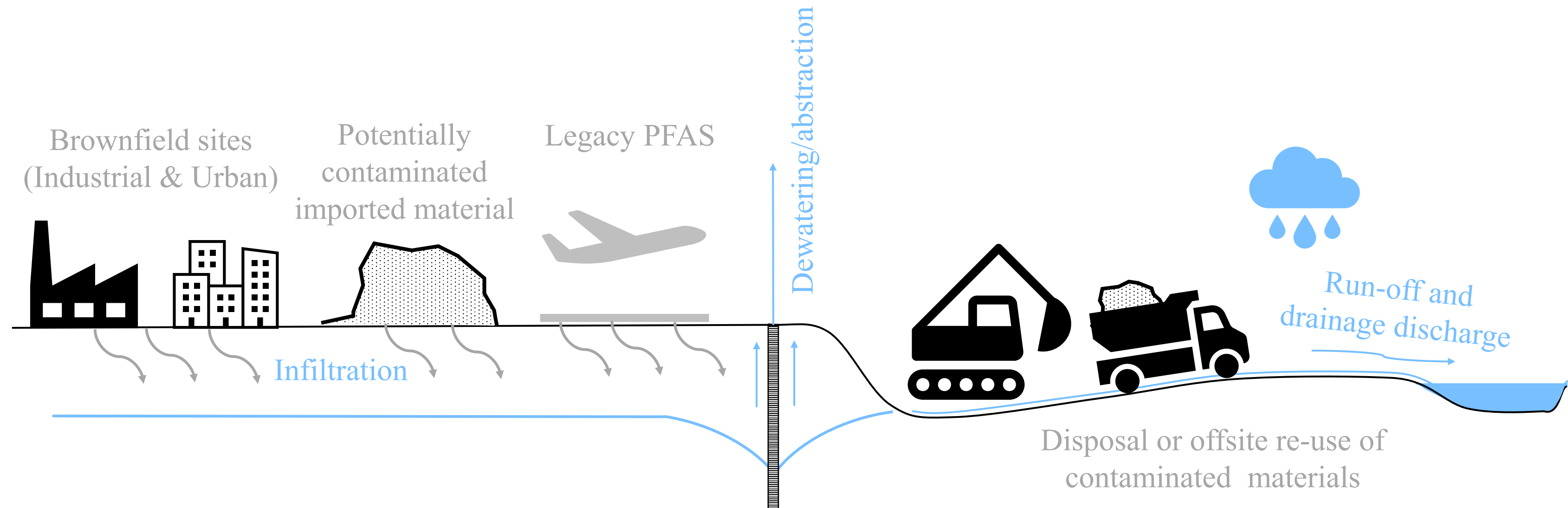
2028

- Soil Monitoring
Directive transposed
- PFAS enters EU soil
health monitoring
- PFAS soil trigger
values

PFAS in projects

PFAS in projects

Potential PFAS interaction during projects



PFAS in projects

Sources and risks

Fire-fighting	Waste	Industrial	Agricultural	Urban & Civil
• Airports • Fire training areas • Historical fire-fighting events • Military bases • Bulk fuel and solvent storage 	• Landfills • Recycling • Solid Recovered Fuel • Compost facilities • Wastewater treatment • Biosolids 	• Chemical manufacturing • Pharmaceuticals • Paper and wood processing facilities • Data centres 	• Pesticides and herbicides • Fertilisers 	• Personal care products • Non-stick pans • Detergents • Waterproof clothing • Food and drink packaging 

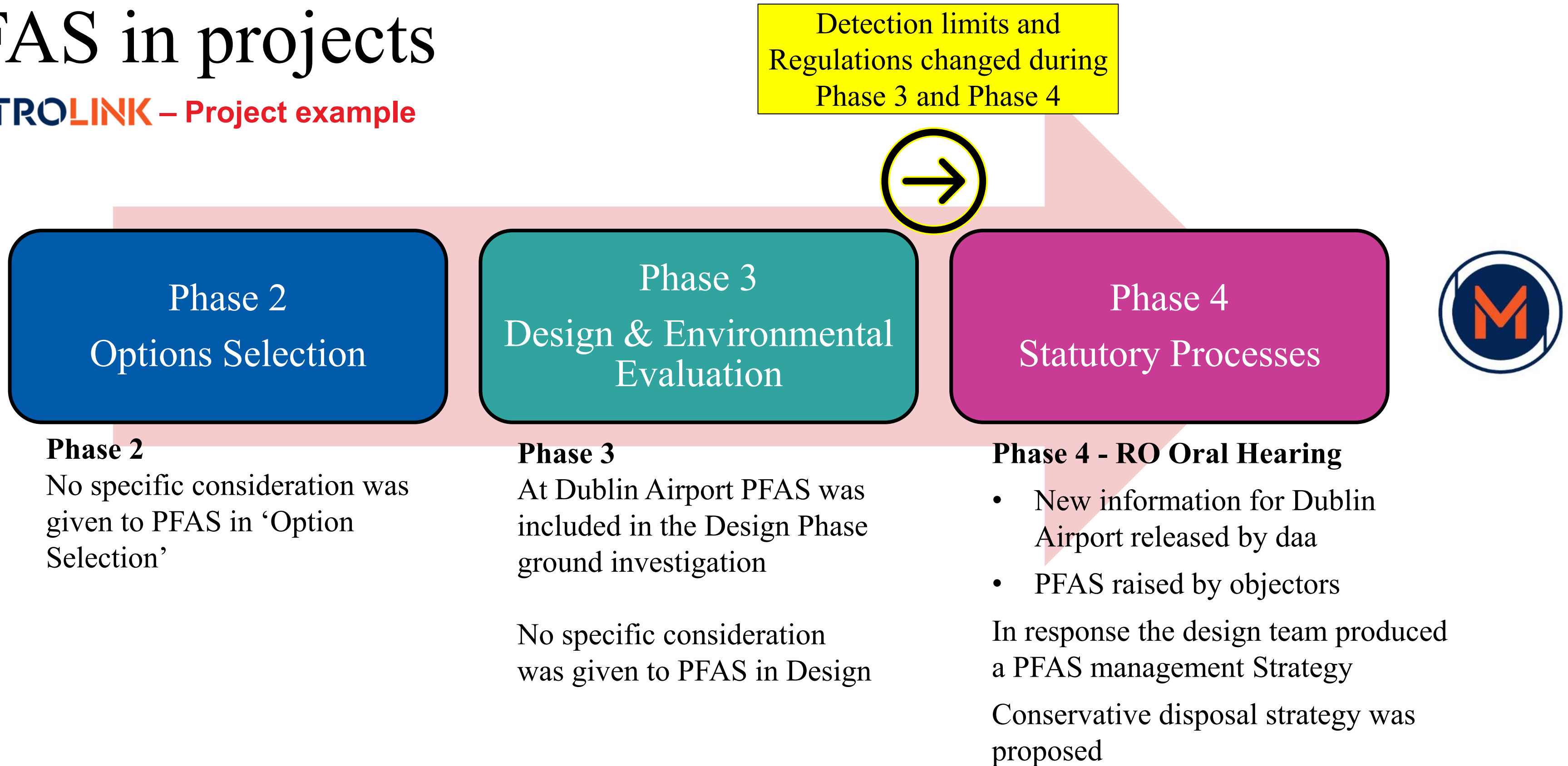
Highest



Lowest

PFAS in projects

METROLINK – Project example



Lack of guidance - When should PFAS be considered and how to manage the risks

PFAS in projects

Existing guidance

Strengths

PFAS behaviour, fate and site investigation

Lab analysis, quality procedures and detection limits

Risk assessment and remediation options appraisal

Waste classification and regulatory controls

Weaknesses

Limited relevance to Ireland and infrastructure projects

No corridor-scale screening

No guidance for Non-Persistent Organic Pollutants PFAS waste or soil re-use

Earthworks and material management, construction dewatering and discharge do not consider PFAS risks

PFAS in projects

Proposed PFAS TII Guidance

- TII are proposing to prepare a Technical Guidance Document to support project managers to proactively manage the risk of PFAS
 - Consider TII Project Phases and ensure it is identified, assessed, and mitigated at the appropriate stage of the project.
 - Aid early screening and consistent risk-management frameworks of legacy PFAS
 - A benchmark guidance for other national road, light rail, metro and active travel projects.
 - Guidance should be based on principles to allow for a changing regulatory environment
- The project is active and aimed to be completed in Q3 2027



TII Publications

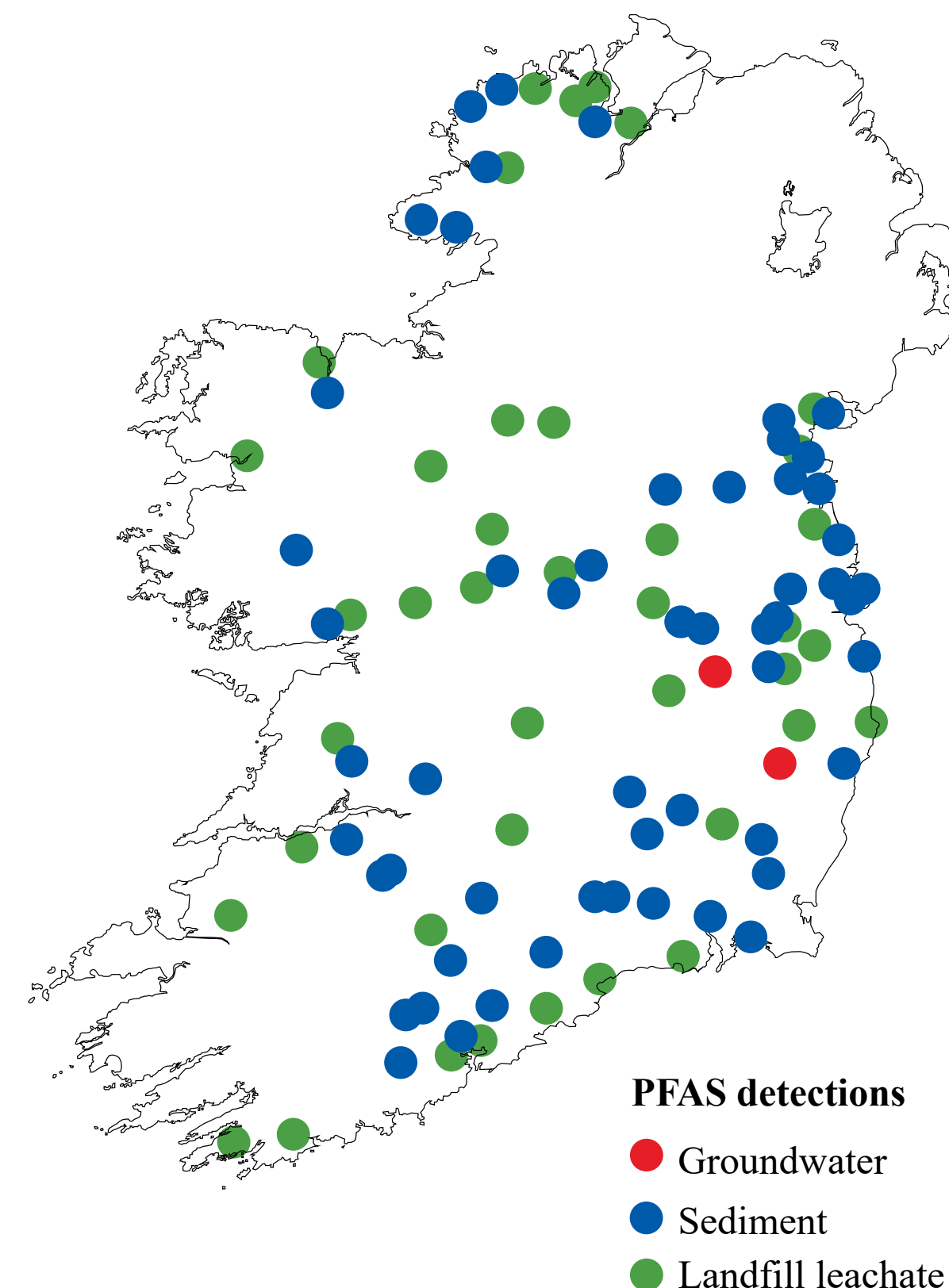


Summary

PFAS: Understanding the Risks for TII Projects

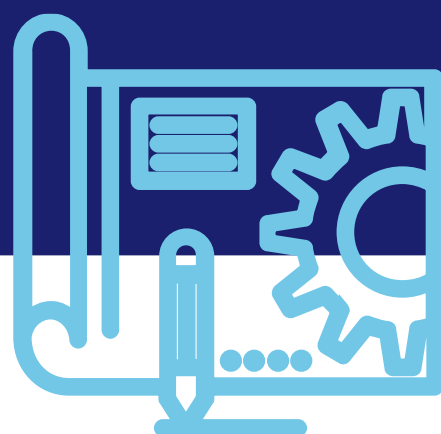
Summary

- PFAS are a group of commonly used chemicals which are heavily regulated
- Science and Policy on PFAS is rapidly evolving and Regulations are becoming more restrictive
- PFAS is present in Ireland and is recorded in the Irish environment
- It has already been and can be a future challenge on projects
- Current guidance is insufficient to support decision making in projects and not specific to Ireland
- TII are actively working to prepare a dedicated guidance to support future project teams in proactively managing the risk of PFAS
- Proposed guidance will provide consistency, reduce project risk, support proportionate decision making across TII projects



ARUP

Q&A



Session 6: Sustainability & Other Topics

Q&A

Chair: Mary Flynn, TII Regional Manager

- **Anthony Duffy, TII**
- **Michelle Doyle, McCann Fitzgerald LLP**
- **Nathan Walsh, McCann Fitzgerald LLP**
- **Donal Minnock, TII**
- **Michael McGrath, TII**
- **Christopher Newton, Arup**

Conference Close

Lunch starting at 1pm

